
THE W.W. OLIVER MANUFACTURING COMPANY

OLIVER



QUALITY

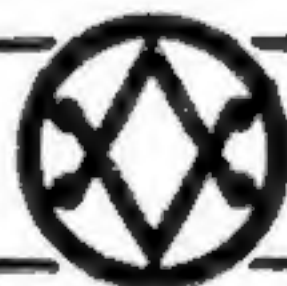
CATALOG NO. 18

BUFFALO, NEW YORK, U. S. A.

C A T A L O G N o . 1 8

ROLLING MILLS
SPEED LATHES
POLISHING MACHINERY
DROP PRESSES
DRAW BENCHES
DRILLS, ETC.

OLIVER



QUALITY

THE W. W. OLIVER MFG. CO.

1483-1485 NIAGARA STREET
BUFFALO, NEW YORK, U. S. A.

OLIVER



QUALITY

CATALOG No. 18

This catalog supersedes Catalog No. 17.
Copies will be mailed free on application.

TELEGRAPHIC CODE

Each machine has a code word which will be found in parentheses. Kindly use it when ordering.

TERMS

Thirty days from date of invoice, unless other terms are made.

SHIPMENTS

All shipments are made free on board cars at Buffalo.

BOXING

An extra charge for boxing will be made on export shipments.

CABLE ADDRESS

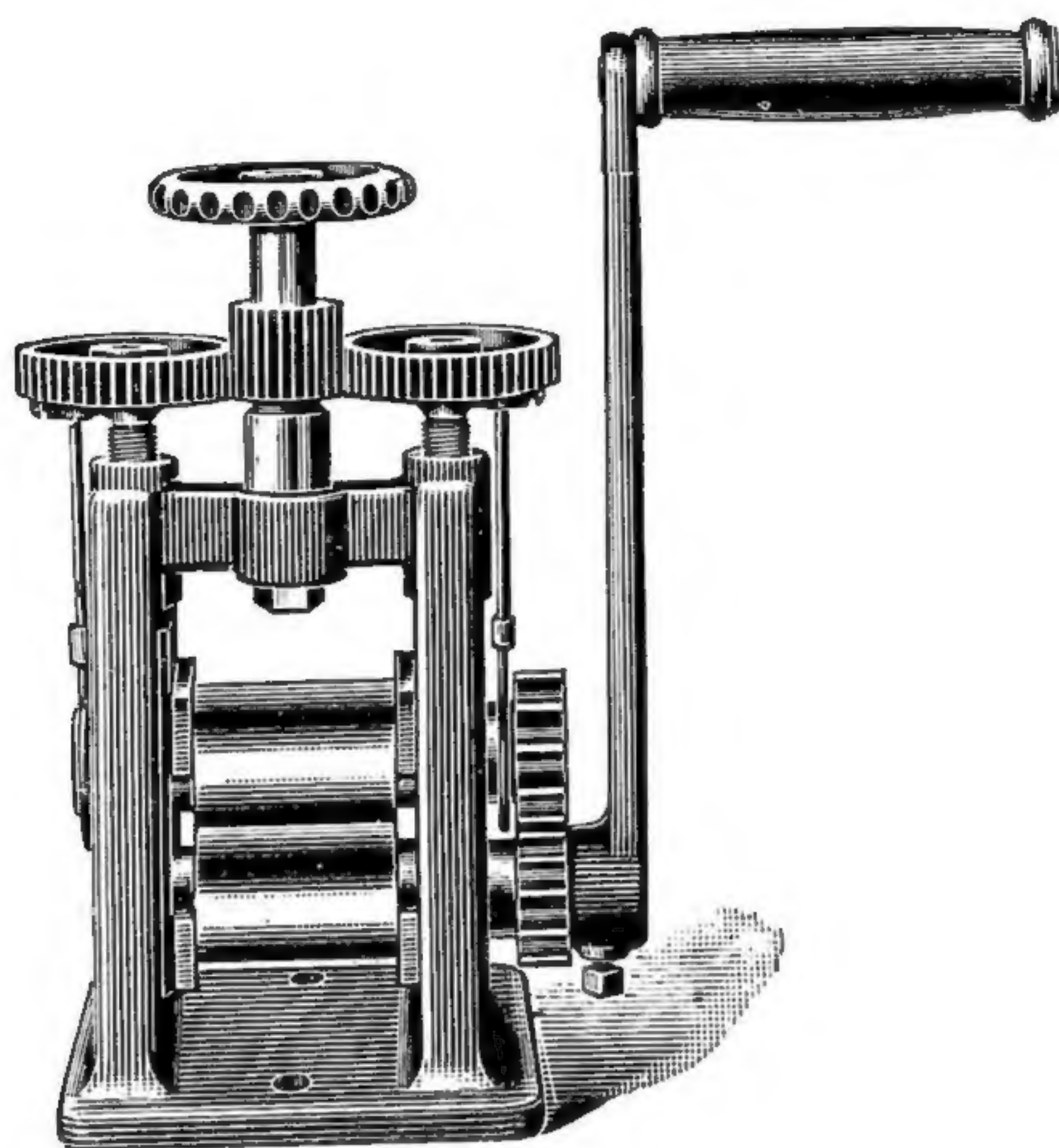
Oliver Buffalo.

THE W. W. OLIVER MFG. CO.

1483-1485 Niagara Street
Buffalo, N. Y., U. S. A.



The Crown Dental Rolling Mill With Flat Rolls



A Rolling Mill especially adapted to the needs of the dental profession. It is extremely well made, the rolls being of crucible steel, nicely hardened, ground, and polished. The pinions are cut from steel bar. The rolls can be quickly removed from the frame.

Price, as in cut (Farina), \$30.00.

Rolls — 2" diam. x 3" long.

Net Weight — 45 lbs.

Weight Boxed — 54 lbs.

Dimensions Box — 18" x 11" x 8".

MOUNTED ON COLUMN

Price (Firkin), \$38.00.

Net Weight — 110 lbs.

Gross " — Domestic Shipment, 150 lbs.

" " — Foreign " 190 "

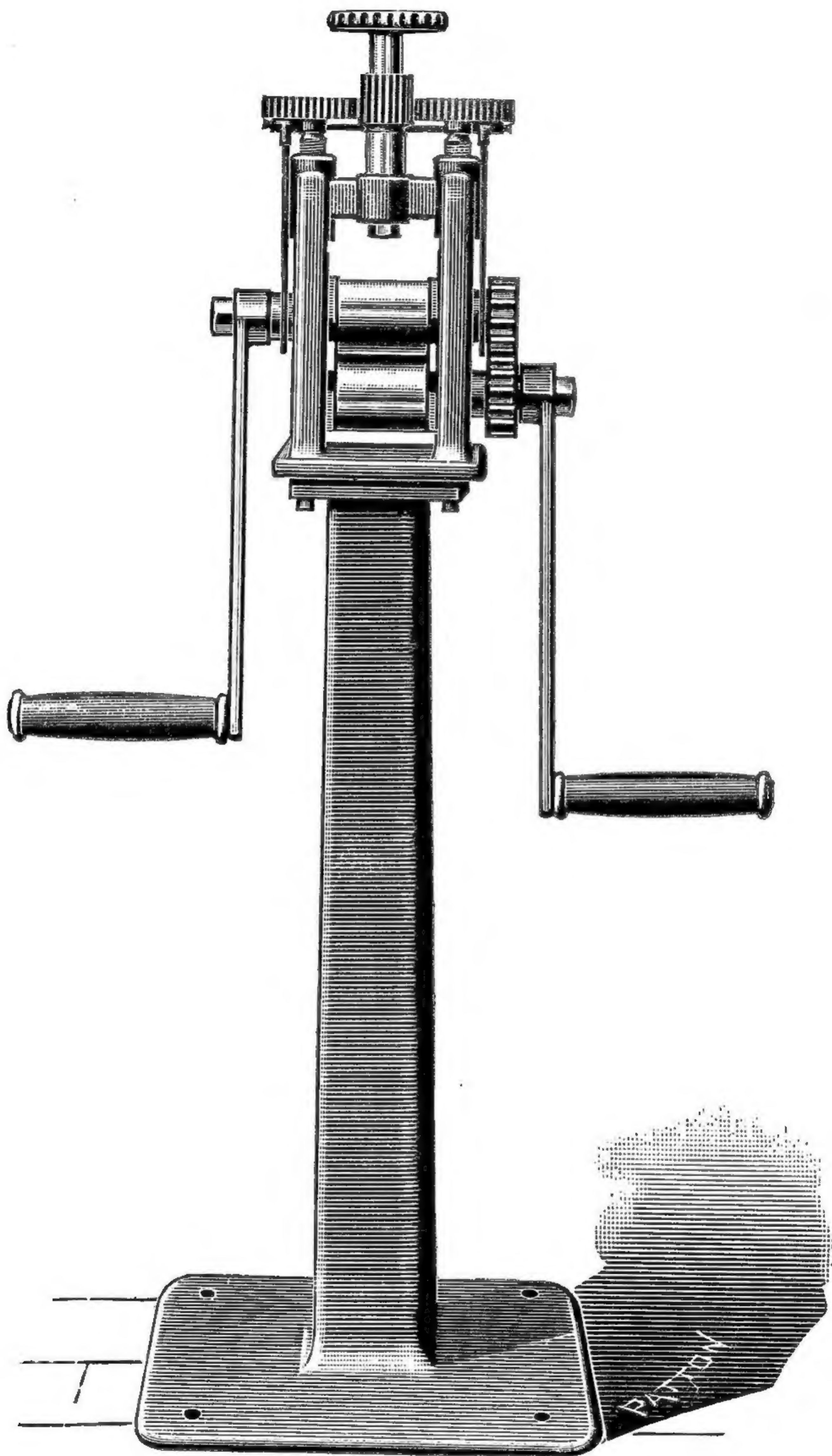
Dimensions — " " 49" x 17" x 17".

For ring and square wire rolls, see pages 18 and 19.

OLIVER



QUALITY



NOS. 2, 3, AND 4 SINGLE-GEARED HAND ROLLING
MILLS, FLAT ROLLS



Improved Single-Geared Hand Rolling Mills

WITH FLAT ROLLS

These Mills are built from newly-designed patterns, and are heavy and well proportioned, with many desirable improvements.

The Rolls are made from the finest crucible steel, carefully hardened, ground, and polished, and are fully warranted.

No. 2— (Fabian). Price, \$30.00.

Rolls — $1\frac{1}{2}$ " diam. x 2" long.

Floor Space — 14" x 20".

Net Weight — 73 lbs.

Gross " — Domestic Shipment, about 100 lbs.

" " — Foreign " " 130 "

Dimensions — " " 48" x 16" x 16".

No. 3— (Fable). Price, \$50.00.

Rolls — $2\frac{1}{4}$ " diam. x 3" long.

Floor Space — 15" x 25".

Net Weight — 125 lbs.

Gross " — Domestic Shipment, about 165 lbs.

" " — Foreign " " 193 "

Dimensions — " " 50" x 18" x 17".

No. 4— (Fabric). Price, \$75.00.

Rolls — $2\frac{3}{4}$ " diam. x 4" long.

Floor Space — 17" x 28".

Net Weight — 210 lbs.

Gross " — Domestic Shipment, 225 lbs.

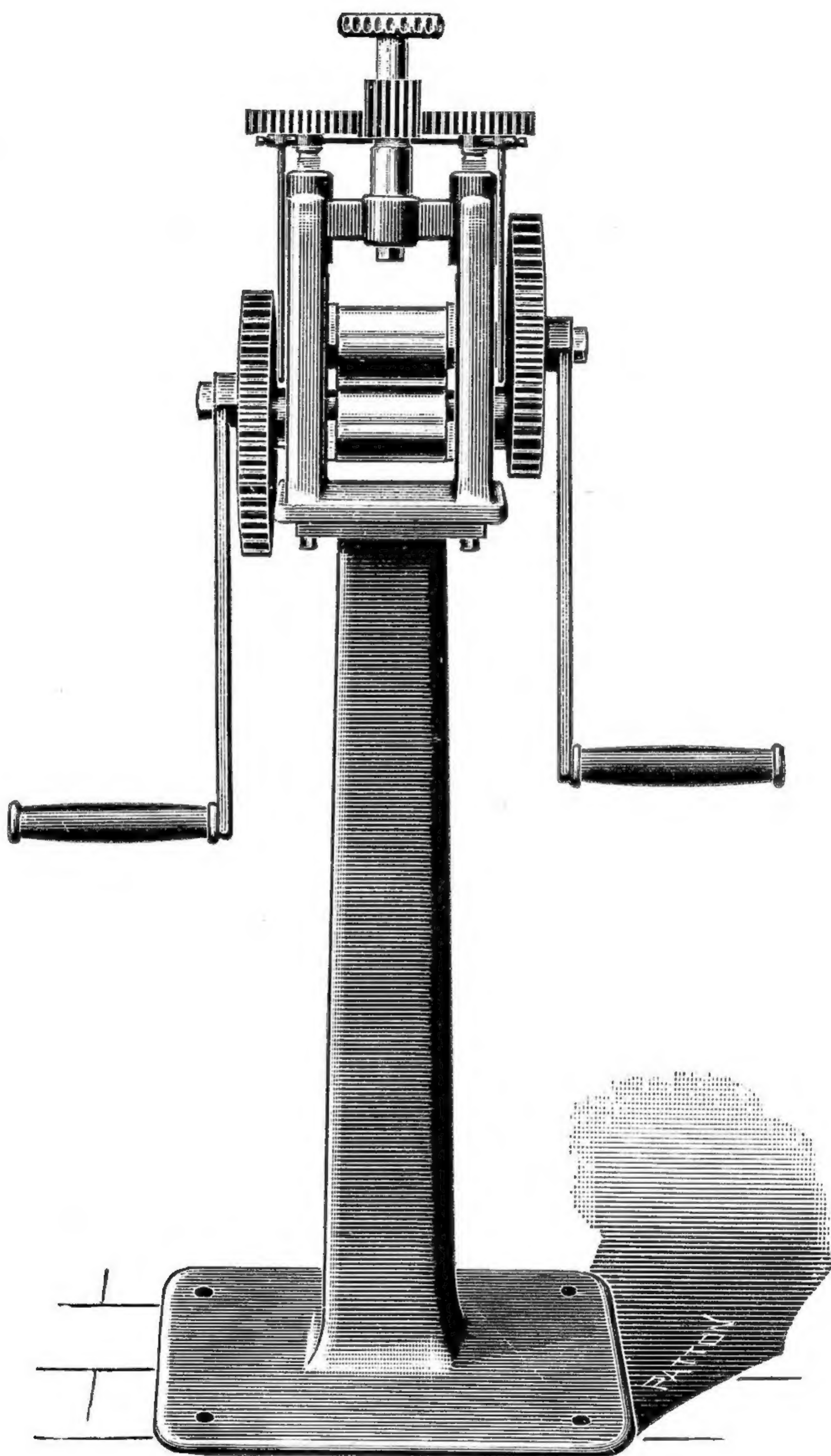
" " — Foreign " 260 "

Dimensions — " " 54" x 19" x 19".

OLIVER



QUALITY



NOS. 3 AND 4 DOUBLE-GEARED HAND ROLLING
MILLS, FLAT ROLLS



Improved Double-Geared Hand Rolling Mills

WITH FLAT ROLLS

These Rolling Mills have all the latest improvements found in the single-geared rolling mills, including our improved lifting device, which, by dispensing with all inner boxes and springs, makes it convenient to interchange rolls.

All Rolling Mills are fitted with wrought-steel pinions and bronze boxes.

The Gears are machine cut from solid stock and have a ratio of 4 to 1.

No. 3— (Face). Price, \$75.00.

Rolls — $2\frac{1}{4}$ " diam. x 3" long.

Floor Space — 15" x 26".

Net Weight — 151 lbs.

Gross " — Domestic Shipment, about 200 lbs.

" " — Foreign " 236 "

Dimensions — " " 50" x 17" x 17".

No. 4— (Facet). Price, \$100.00.

Rolls — $2\frac{3}{4}$ " diam. x 4" long.

Floor Space — 17" x 30".

Net Weight — 218 lbs.

Gross " — Domestic Shipment, about 246 lbs.

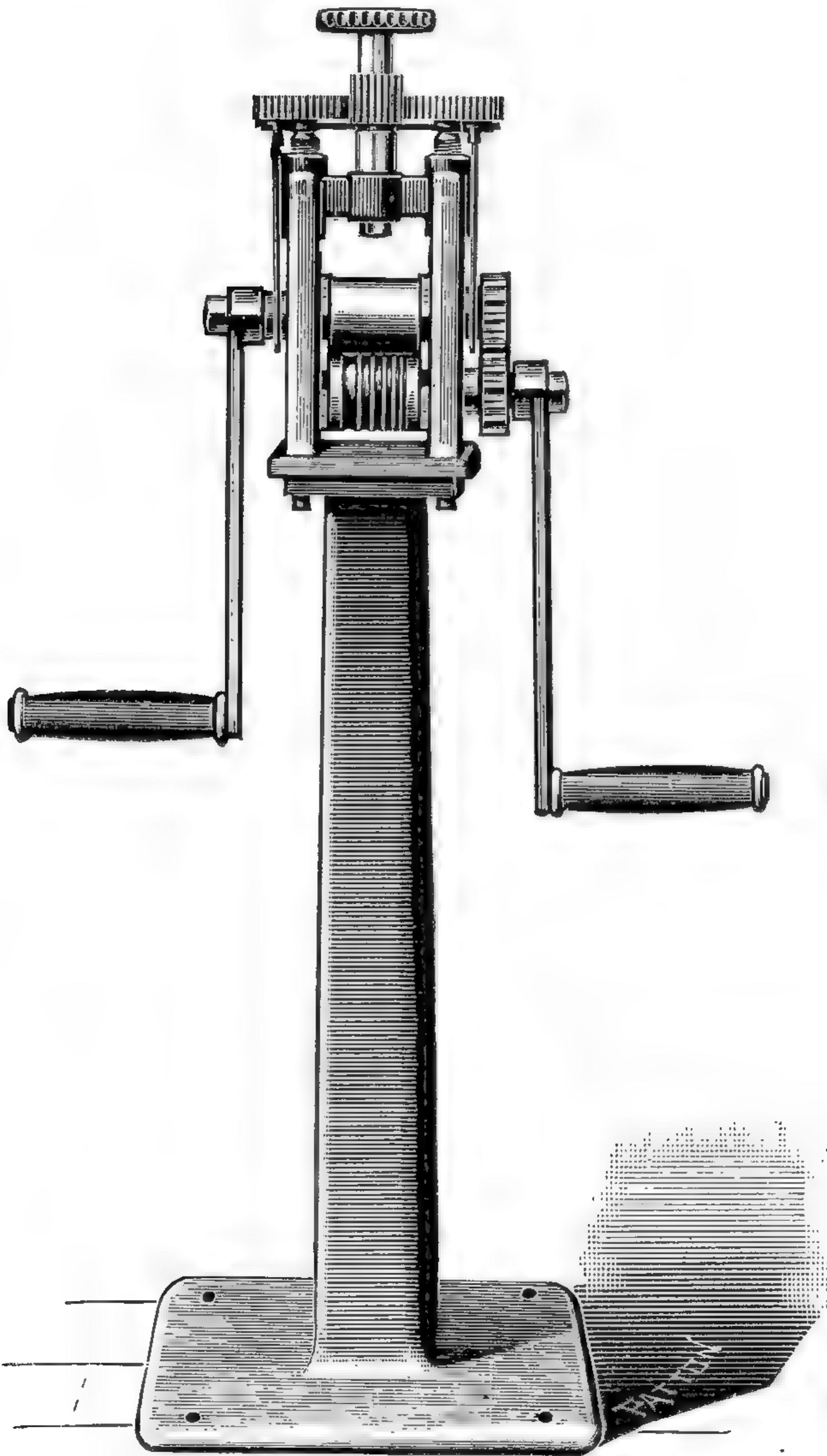
" " — Foreign " 310 "

Dimensions — " " 54" x 19" x 19".

OLIVER



QUALITY



Nos. 2, 3, AND 4 SINGLE-GEARED HAND ROLLING
MILLS, FOR PLAIN RINGS



Improved Single-Geared Hand Rolling Mills

WITH ONE FLAT AND ONE RING ROLL

The Grooves in ring rolls are made with special care and will produce perfectly uniform stock, which can be finished with the minimum amount of waste.

Our Standard Sizes and Shapes, shown on page 20, will be furnished, unless otherwise ordered.

No. 2 — (Facial). Price, \$33.00.

Rolls — $1\frac{1}{2}$ " diam. x 2" long.

Floor Space — 14" x 20".

Net Weight — 73 lbs.

Gross " — Domestic Shipment, about 100 lbs.

" " — Foreign " " 130 "

Dimensions — " " 48" x 16" x 16".

No. 3 — (Facing). Price, \$53.00.

Rolls — $2\frac{1}{4}$ " diam. x 3" long.

Floor Space — 15" x 25".

Net Weight — 125 lbs.

Gross " — Domestic Shipment, about 165 lbs.

" " — Foreign " " 193 "

Dimensions — " " 50" x 18" x 17".

No. 4 — (Fact). Price, \$80.00.

Rolls — $2\frac{3}{4}$ " diam. x 4" long.

Floor Space — 17" x 28".

Net Weight — 210 lbs.

Gross " — Domestic Shipment, 225 lbs.

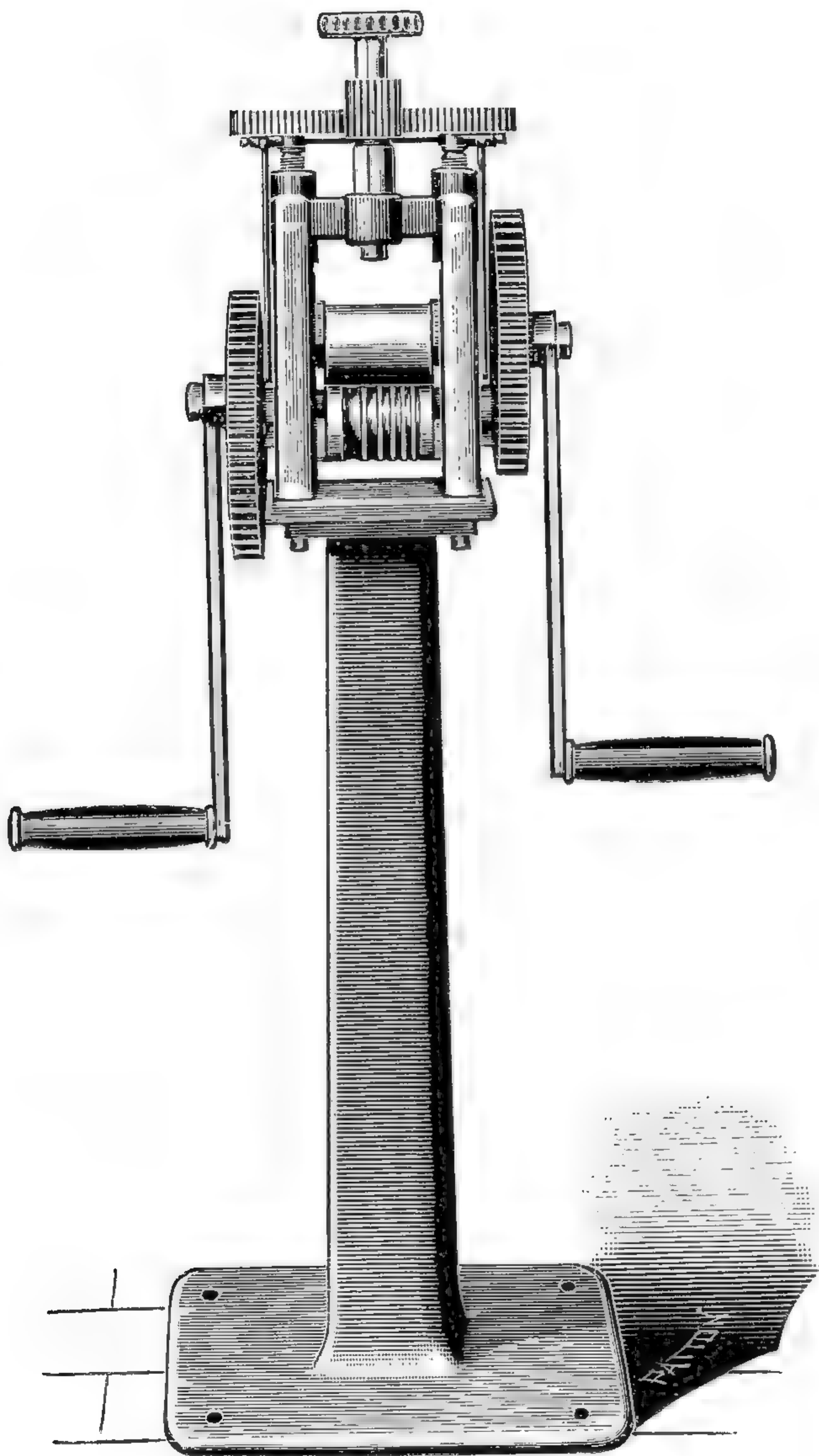
" " — Foreign " 260 "

Dimensions — " " 54" x 19" x 19".

OLIVER



QUALITY



NOS. 3 AND 4 DOUBLE-GEARED HAND ROLLING
MILLS, FOR PLAIN RINGS



Improved Double-Geared Hand Rolling Mills

WITH ONE FLAT AND ONE RING ROLL

Special Grooved Rolls can be furnished when our standard shapes will not answer. We cannot make these special grooves with a rough drawing as a guide, but require metal patterns of the shapes that are wanted.

We use only the best paint on our rolling mills, and we apply it in the right way.

No. 3 — (Factor). Price, \$78.00.

Rolls — $2\frac{1}{4}$ " diam. x 3" long.

Floor Space — 15" x 26".

Net Weight — 151 lbs.

Gross " — Domestic Shipment, about 200 lbs.

" " — Foreign " 236 "

Dimensions — " " 50" x 17" x 17".

No. 4 — (Faddle). Price, \$105.00.

Rolls — $2\frac{3}{4}$ " diam. x 4" long.

Floor Space — 17" x 30".

Net Weight — 218 lbs.

Gross " — Domestic Shipment, about 246 lbs.

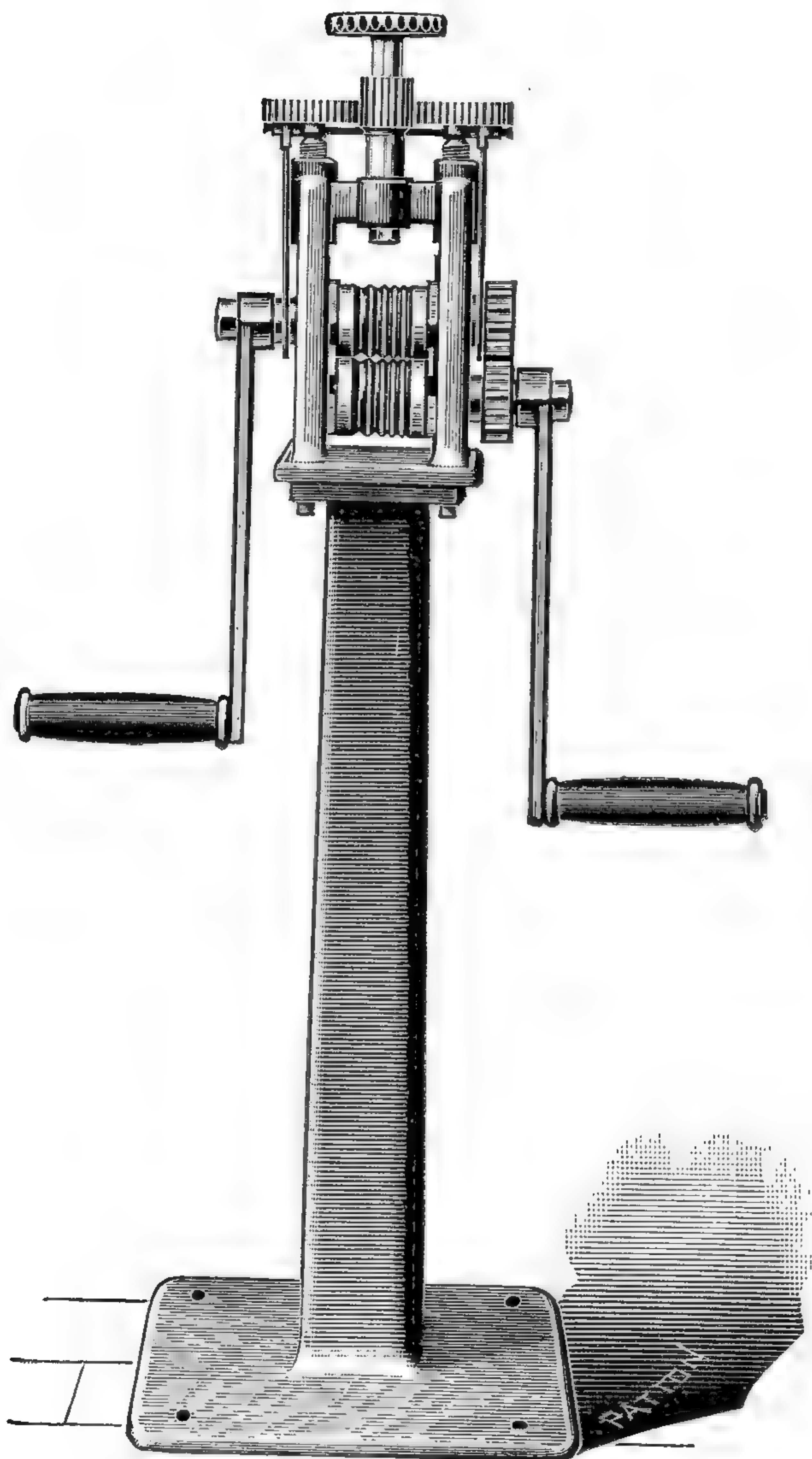
" " — Foreign " 310 "

Dimensions — " " 54" x 19" x 19".

OLIVER



QUALITY



Nos. 2, 3, AND 4 SINGLE-GEARED HAND ROLLING
MILLS, SQUARE WIRE ROLLS



Improved Single-Geared Hand Rolling Mills

WITH SQUARE WIRE ROLLS

The Close Fitting of rolls between the boxes in mills used for rolling square wire is essential to the production of perfect wire.

No. 2 — (Fade). Price, \$36.00.

Rolls — $1\frac{1}{2}$ " diam. x 2" long.

Floor Space — 14" x 20".

Net Weight — 73 lbs.

Gross " — Domestic Shipment, about 100 lbs.

" " — Foreign " 130 "

Dimensions — " " 48" x 16" x 16".

No. 3 — (Fadge). Price, \$56.00.

Rolls — $2\frac{1}{4}$ " diam. x 3" long.

Floor Space — 15" x 25".

Net Weight — 125 lbs.

Gross " — Domestic Shipment, about 165 lbs.

" " — Foreign " 193 "

Dimensions — " " 50" x 18" x 17".

No. 4 — (Fagot). Price, \$85.00.

Rolls — $2\frac{3}{4}$ " diam. x 4" long.

Floor Space — 17" x 28".

Net Weight — 210 lbs.

Gross " — Domestic Shipment, 225 lbs.

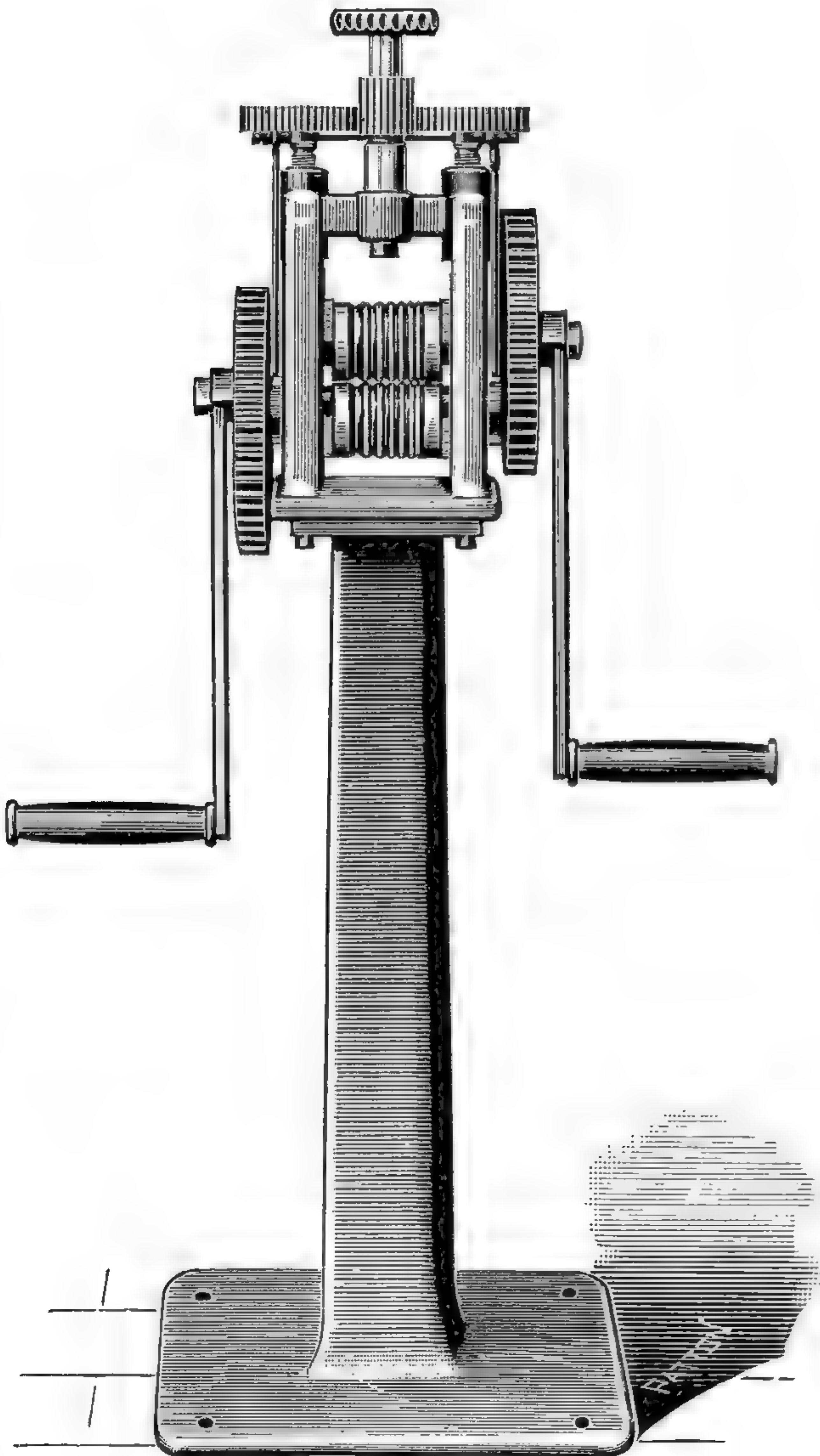
" " — Foreign " 260 "

Dimensions — " " 54" x 19" x 19".

OLIVER



QUALITY



NOS. 3 AND 4 DOUBLE-GEARED HAND ROLLING
MILLS, SQUARE WIRE ROLLS



Improved Double-Geared Hand Rolling Mills

WITH SQUARE WIRE ROLLS

In Square Wire Grooves the bottoms are slightly rounded, and by giving the stock a quarter turn as it is passed from one groove to another all difficulty of roughness and cracking is overcome, and perfect wire is produced.

In ordering extra rolls for any of our rolling mills, kindly give the stock number of the rolling mill. This will be found under the center pinion of the roll-adjusting device.

No. 3 — (Fail). Price, \$81.00.

Rolls — $2\frac{1}{4}$ " diam. x 3" long.

Floor Space — 15" x 26".

Net Weight — 151 lbs.

Gross " — Domestic Shipment, about 200 lbs.

" " — Foreign " " 236 "

Dimensions — " " 50" x 17" x 17".

No. 4 — (Faint). Price, \$110.00.

Rolls — $2\frac{3}{4}$ " diam. x 4" long.

Floor Space — 17" x 30".

Net Weight — 218 lbs.

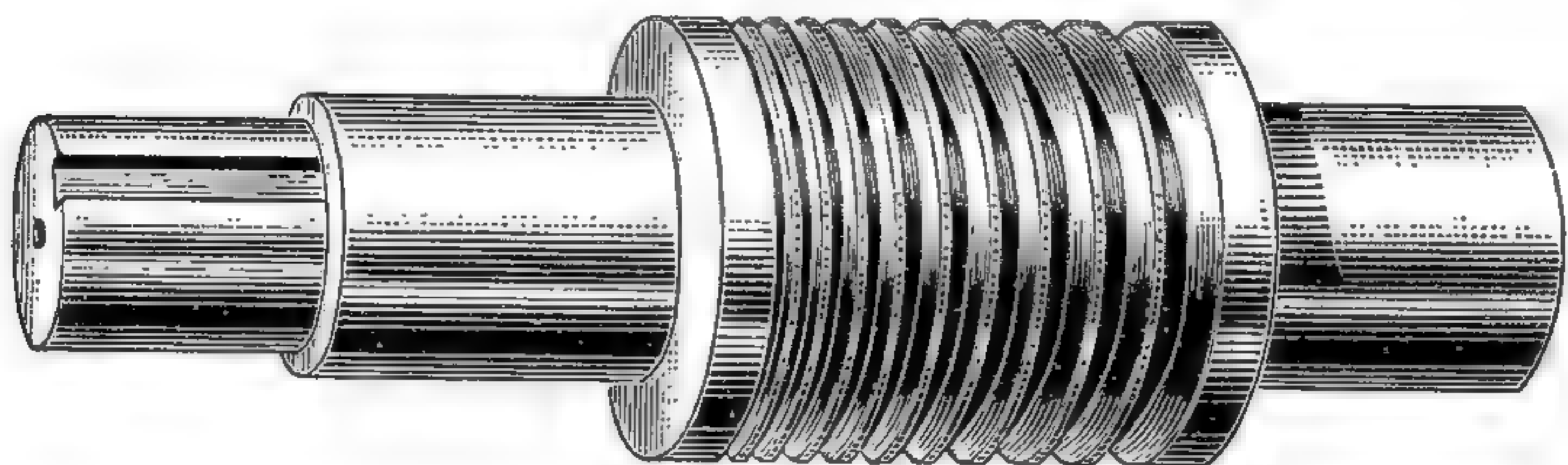
Gross " — Domestic Shipment, about 246 lbs.

" " — Foreign " " 310 "

Dimensions — " " 53" x 19" x 19".

Square Wire Rolls

FOR HAND OR POWER ROLLING MILLS



Crown	— 2" diam. x 3" long, per pair, . . .	Price, \$30.00
No. 2	— 1½" diam. x 2" long, per pair, . . .	" 20.00
No. 3	— 2¼" " x 3" " " " . . .	" 30.00
No. 4	— 2¾" " x 4" " " " . . .	" 50.00

To obtain the code word for a given pair of square-wire rolls, add "ion" to the code word of the rolling mill to which the pair of square-wire rolls are to be fitted.

Example.— The code word of a pair of square-wire rolls for No. 3 D.G. Hand Rolling Mill is (Failion).

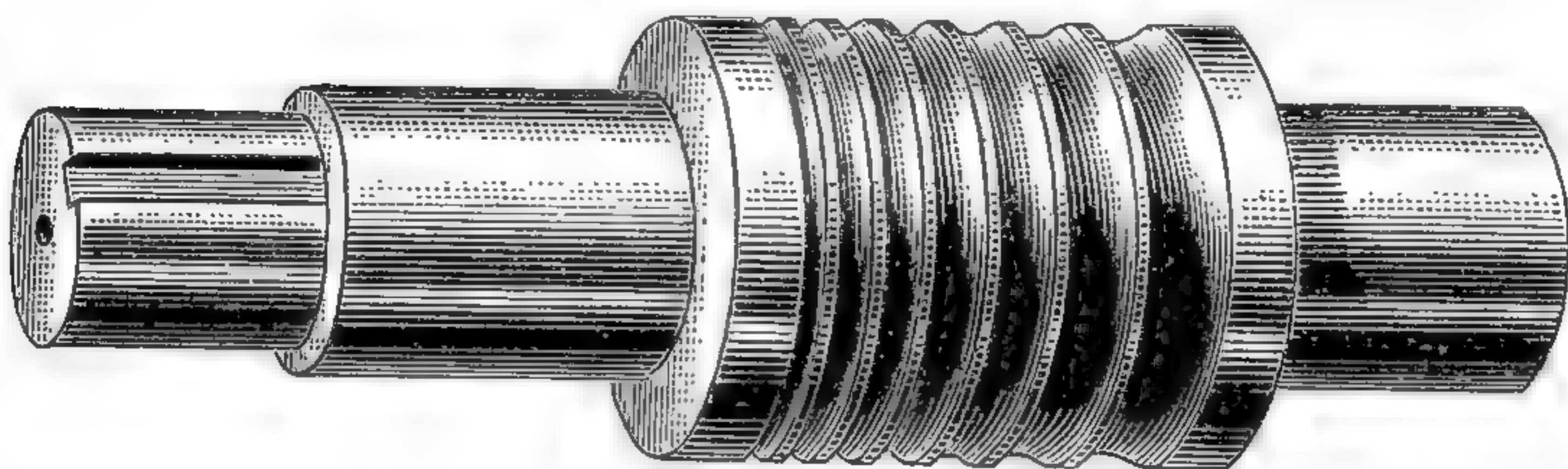
No extra charge made on gears attached to grooved rolls for hand mills.

Large gear No. 3 Power Mills (Fusee).	Price, \$4.00
" " No. 4 " " (Fusty).	" 4.00



Plain Ring Rolls

FOR HAND OR POWER ROLLING MILLS



Crown	— 2" diam. x 3" long, single,	Price, \$15.00
No. 2	— 1½" diam. x 2" long, single,	" 10.00
No. 3	— 2¼" " x 3" " "	" 15.00
No. 4	— 2¾" " x 4" " "	" 25.00

To obtain the code word for a given Plain Ring Roll, add "ing" to the code word of the rolling mill to which the ring roll is to be fitted.

For example.— The code word of a plain ring roll for No. 2S.G. Hand Rolling Mill is (Fabianing).

To produce perfect wire the rolls have to be closely fitted between the boxes. To do this, we must have the mill in which the rolls are to be used.

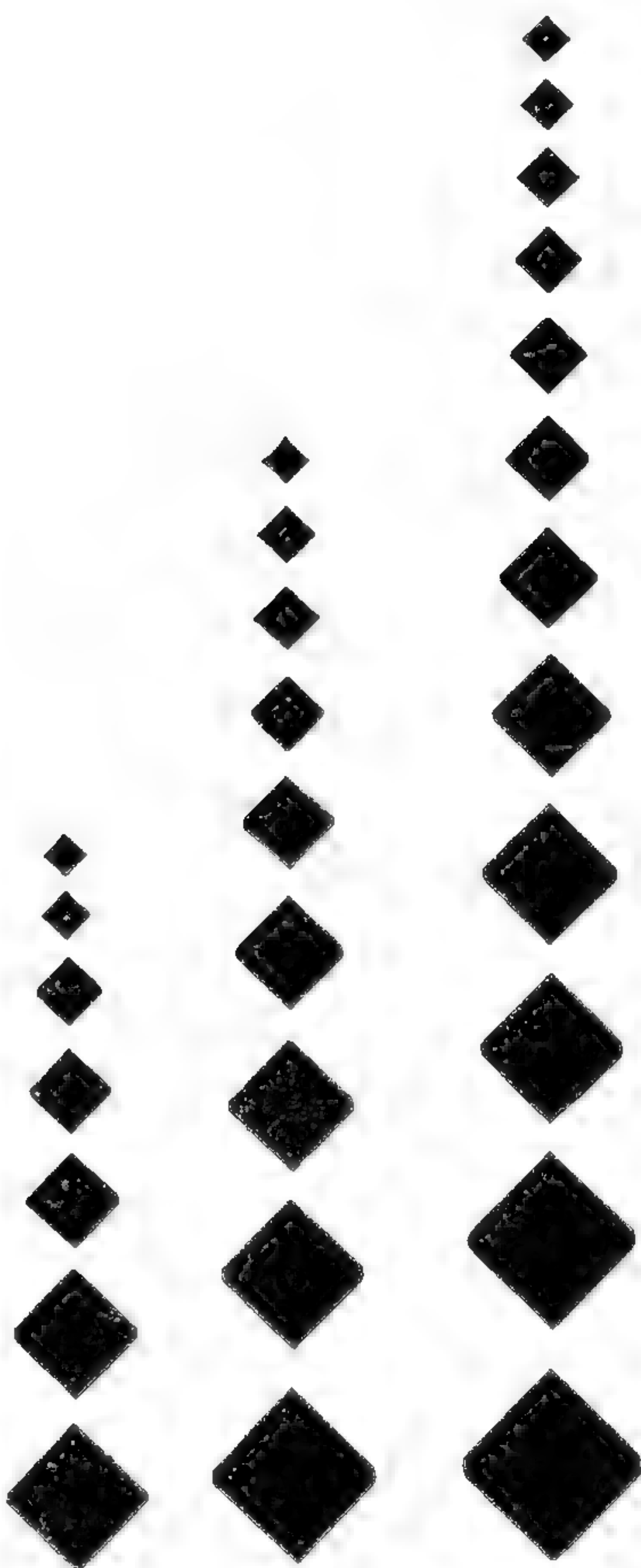


Standard Shapes and Sizes



No. 2 No. 3 No. 4

Standard shapes
and sizes of grooves
in plain ring rolls.



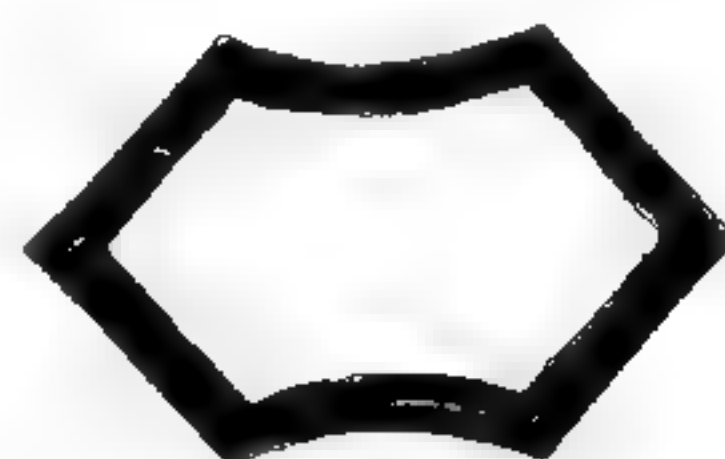
No. 2 No. 3 No. 4

Standard sizes of grooves
in square wire rolls.



Special Service Rolls

We have built in the past rolling mills with special rolls adapted for certain particular kinds of work. Among these have been rolls used for making gold pens for fountain pens, for corrugating sheet copper, for knurling and embossing sheet brass, for making hair springs, and for various kinds of special metal work.



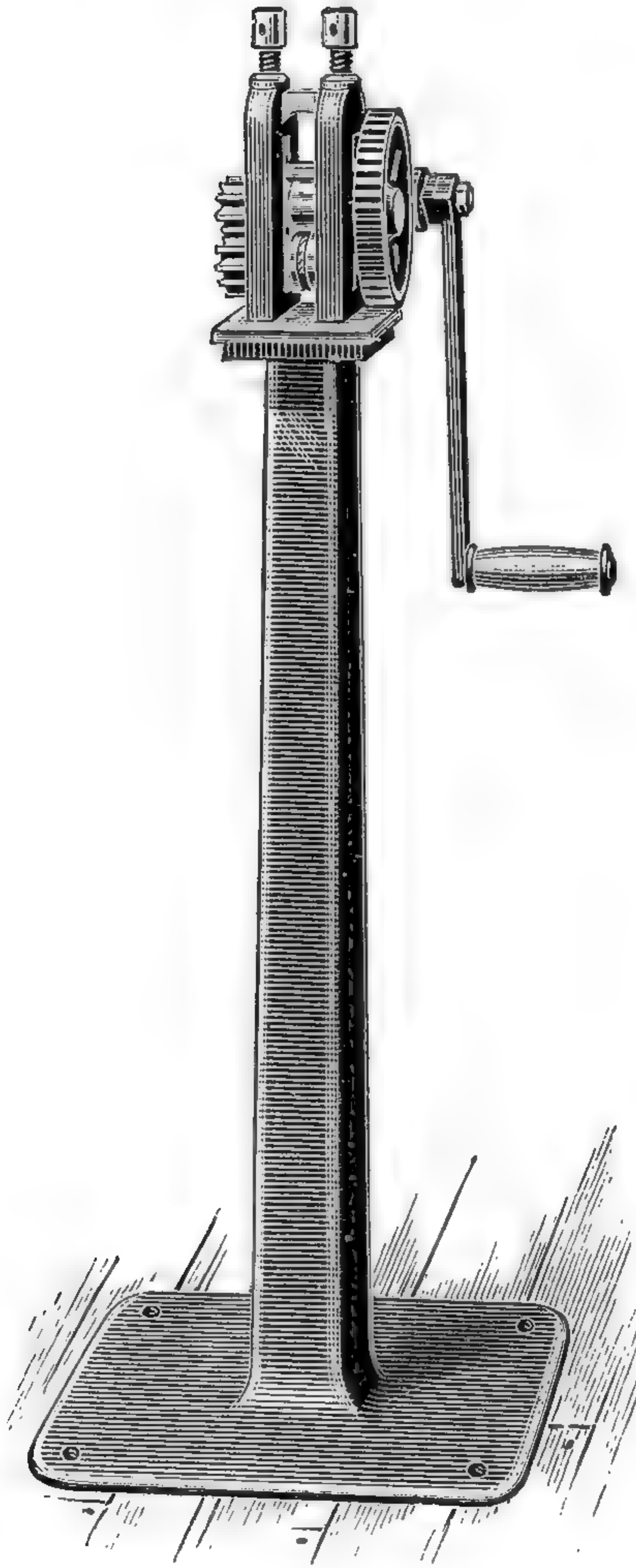
The above illustrations show full-sized cross sections of the original hexagon tubing and the special shape produced by rolling the hexagon through one of our rolling mills with special formed rolls.

There may be some of your manufacturing problems that can be solved by the use of an Oliver Quality Rolling Mill. Should you meet with any such problem, let our service department aid you.

OLIVER



QUALITY



No. 2 UNIVERSAL DOUBLE-GEARED HAND
ROLLING MILL



Universal Double-Geared Hand Rolling Mills

In the Manufacture of band rings, settings, headings, etc., it is preferable to use a rolling mill specially adapted for that work.

Our Universal style of rolling mills are used for that purpose. The rolls are made in form of collars, mounted on keyed shafts.

The Lower Roll is removed by bringing the indicator marks together, and then drawing the shaft out to the left.

The Upper Roll is removed by taking off the pinion gear at the left, and drawing out the shaft to the right.

Unless otherwise specified, the lower roll will be furnished soft, ready for engraving.

Ratio of gearing, 3 to 1.

No. 2— (Fair). Price, \$50.00.

Rolls — $1\frac{1}{2}$ " diam. x $\frac{3}{4}$ " long.

Extra blank rolls, ready for engraving (Faith), each.
\$0.75.

Floor Space — 14" x 18".

Net Weight — 65 lbs.

Gross " — Domestic Shipment, about 100 lbs.

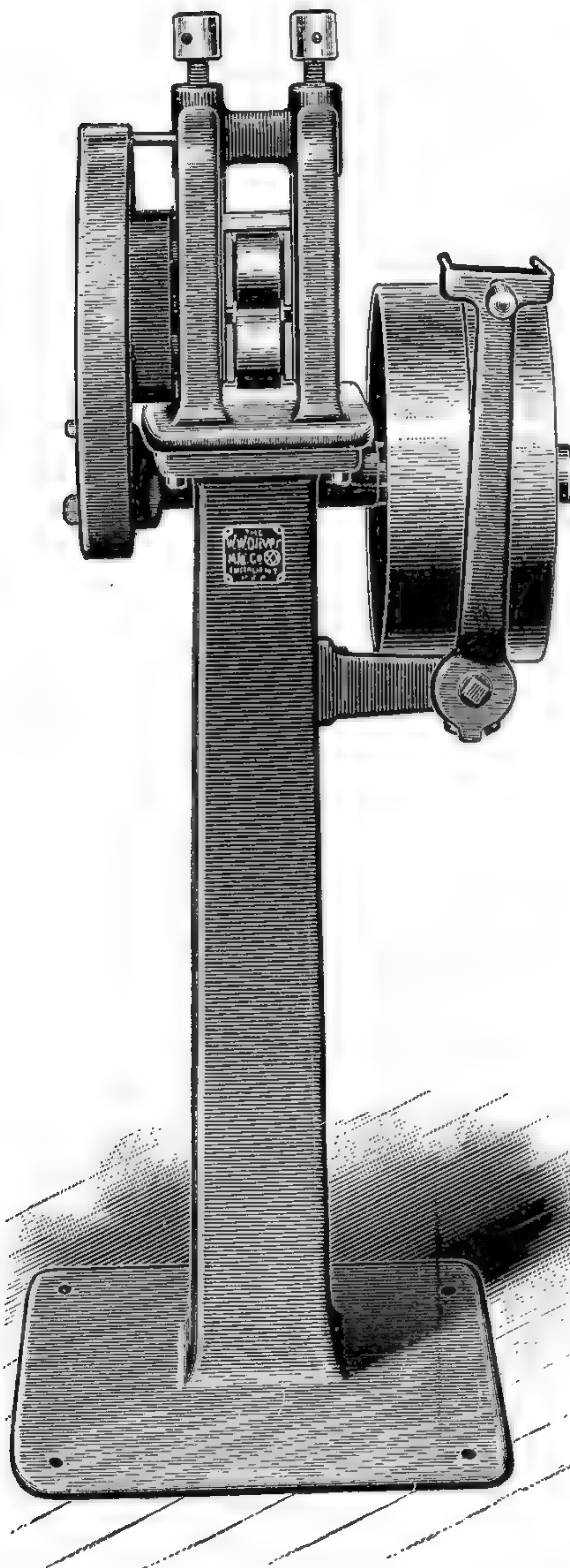
" " — Foreign " " 130 "

Dimensions — " " 44" x 16" x 16".

OLIVER



QUALITY



No. 3 UNIVERSAL DOUBLE-GEARED POWER
ROLLING MILL



Universal Double-Geared Power Rolling Mills

Our No. 3 Universal Power Rolling Mill is particularly adapted to factories making a specialty of work that is produced in this class of rolling mills. It has ample power, and can be profitably used.

The Collar Rolls are removed by bringing the indicator marks together, and drawing out the shafts to the left.

All Gearing is completely covered.

The Tight and Loose pulleys are 12" in diameter for $2\frac{1}{4}$ " belt, and should run about 150 revolutions per minute.

Unless otherwise specified, the lower roll will be furnished soft, ready for engraving.

Ratio of gearing, 6 to 1.

No. 3 — (Fake). Price, \$75.00.

Rolls — $2\frac{1}{4}$ " diam. x $1\frac{1}{4}$ " long.

Extra blank rolls ready for engraving (Faquir), each, \$1.75.

Floor Space — 17" x 18".

Net Weight — 175 lbs.

Gross " — Domestic Shipment, about 250 lbs.

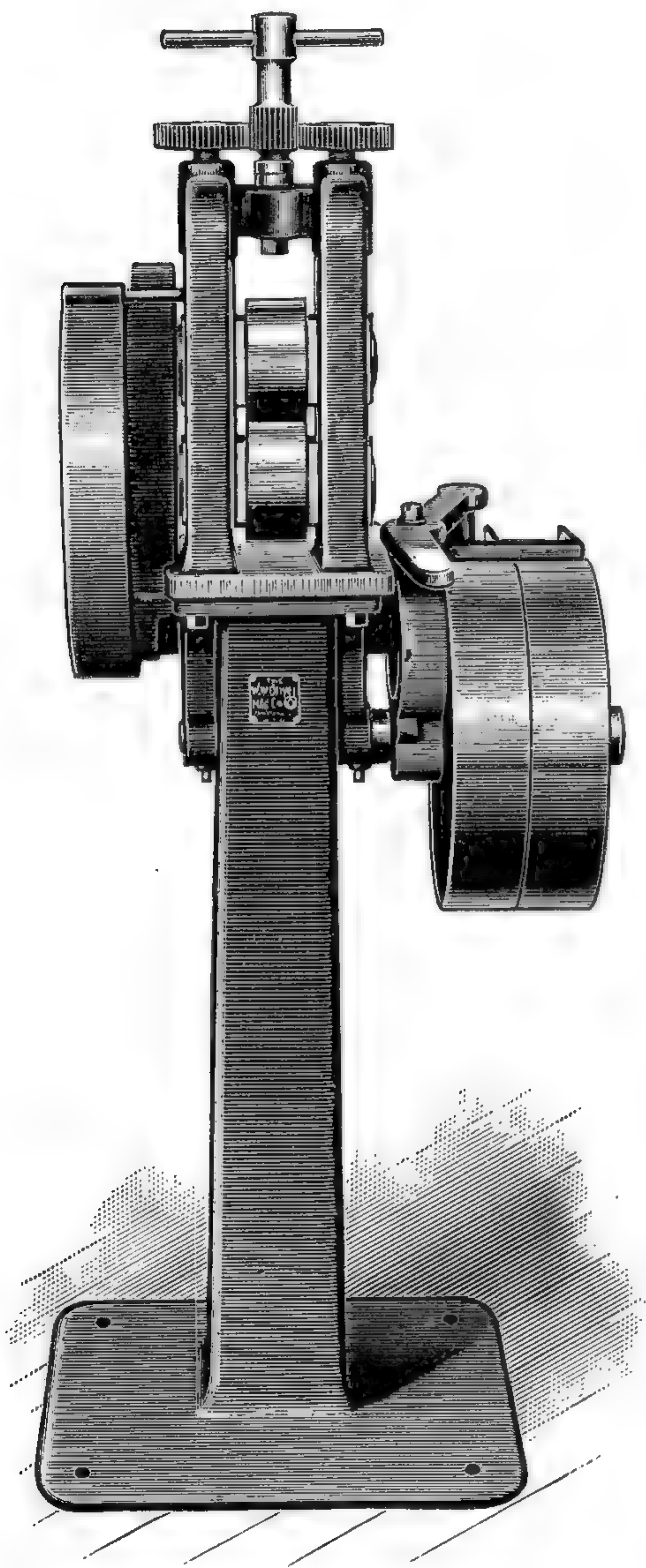
" " — Foreign " " 300 "

Dimensions — " " 47" x 20" x 19".

OLIVER



QUALITY



No. 6 UNIVERSAL TRIPLE-GEARED POWER
ROLLING MILL



Universal Triple-Geared Power Rolling Mills

In the Production of silver ware, metal art work, and ornamental work of various kinds the No. 6 Universal T. G. Power Rolling Mill will be found extremely profitable. It is strongly built and powerfully geared.

The Collar Rolls are removed by bringing the indicator marks together and drawing out the shafts to the left.

All Gearing is completely covered.

The Tight and Loose pulleys are 13" in diameter for 2½" belt, and should run about 250 revolutions per minute.

Unless otherwise specified, the lower roll will be furnished soft, ready for engraving.

Ratio of gearing, 14 to 1.

No. 6— (Faldage). Price, \$140.00.

Rolls— 4" diam. x 2" long.

Extra blank rolls, ready for engraving (Frith), each \$7.00.

Floor Space — 22" x 22".

Net Weight — 325 lbs.

Gross " — Domestic Shipment, about 395 lbs.

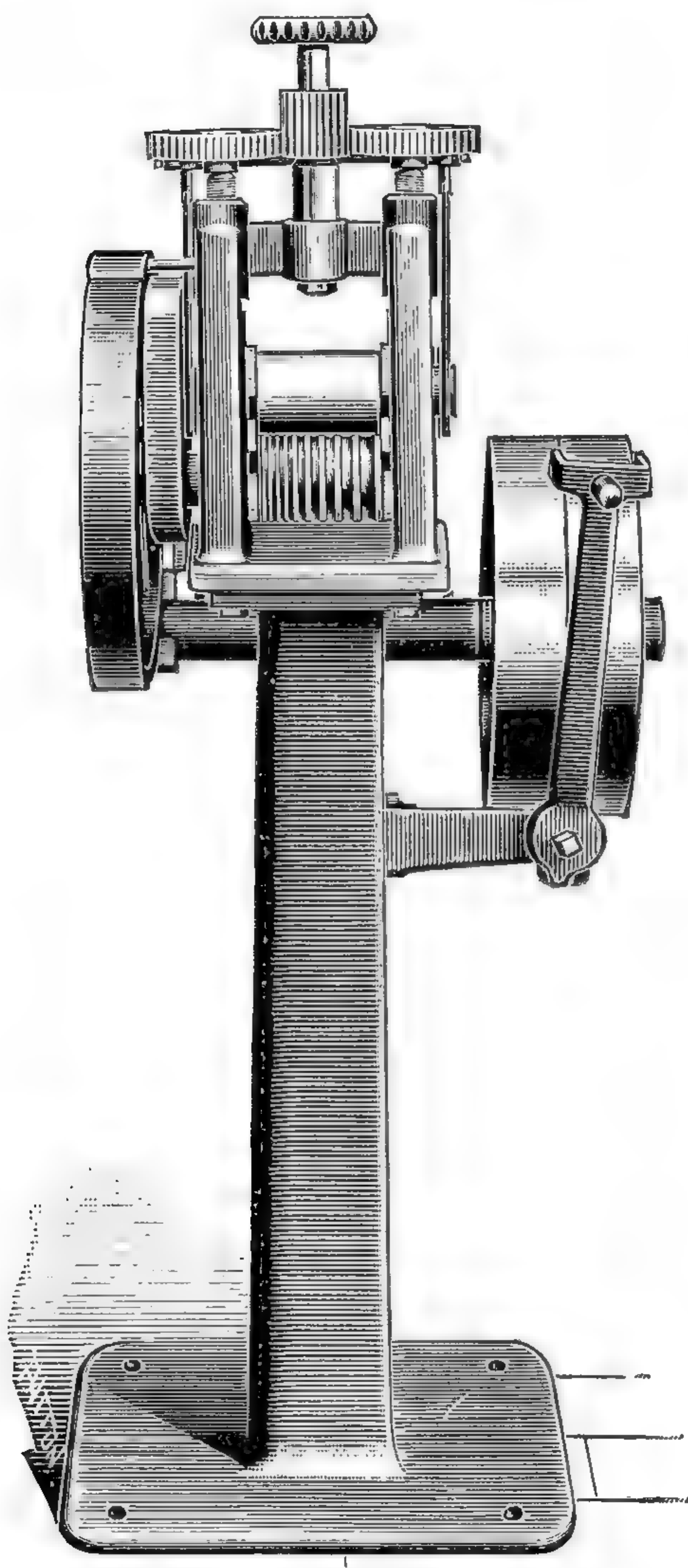
" " — Foreign " " 450 "

Dimensions — " " 55" x 24" x 24".

OLIVER



QUALITY



NOS. 3 AND 4 DOUBLE-GEARED POWER ROLLING
MILLS, FOR PLAIN RINGS



Improved Double-Geared Power Rolling Mills

WITH ONE FLAT AND ONE RING ROLL

These Rolling Mills are built from new patterns, are heavy and well proportioned, and are adapted for rolling square wire and ring stock; they are not intended for use in rolling flat stock, on account of the limit of space between rolls and the power that can be transmitted to the rolls.

The Rolls are easily interchangeable.

No. 3— (Fallow). Price, \$92.00.

Rolls — $2\frac{1}{4}$ " diam. x 3" long.

Floor Space — 18" x 18".

Net Weight — 190 lbs.

Gross " — Domestic Shipment, about 250 lbs.

" " — Foreign " " 300 "

Dimensions — " " 50" x 20" x 20".

No. 4— (Fand). Price, \$115.00.

Rolls — $2\frac{3}{4}$ " diam. x 4" long.

Floor Space — 20" x 20".

Net Weight — 250 lbs.

Gross " — Domestic Shipment, about 320 lbs.

" " — Foreign " " 360 "

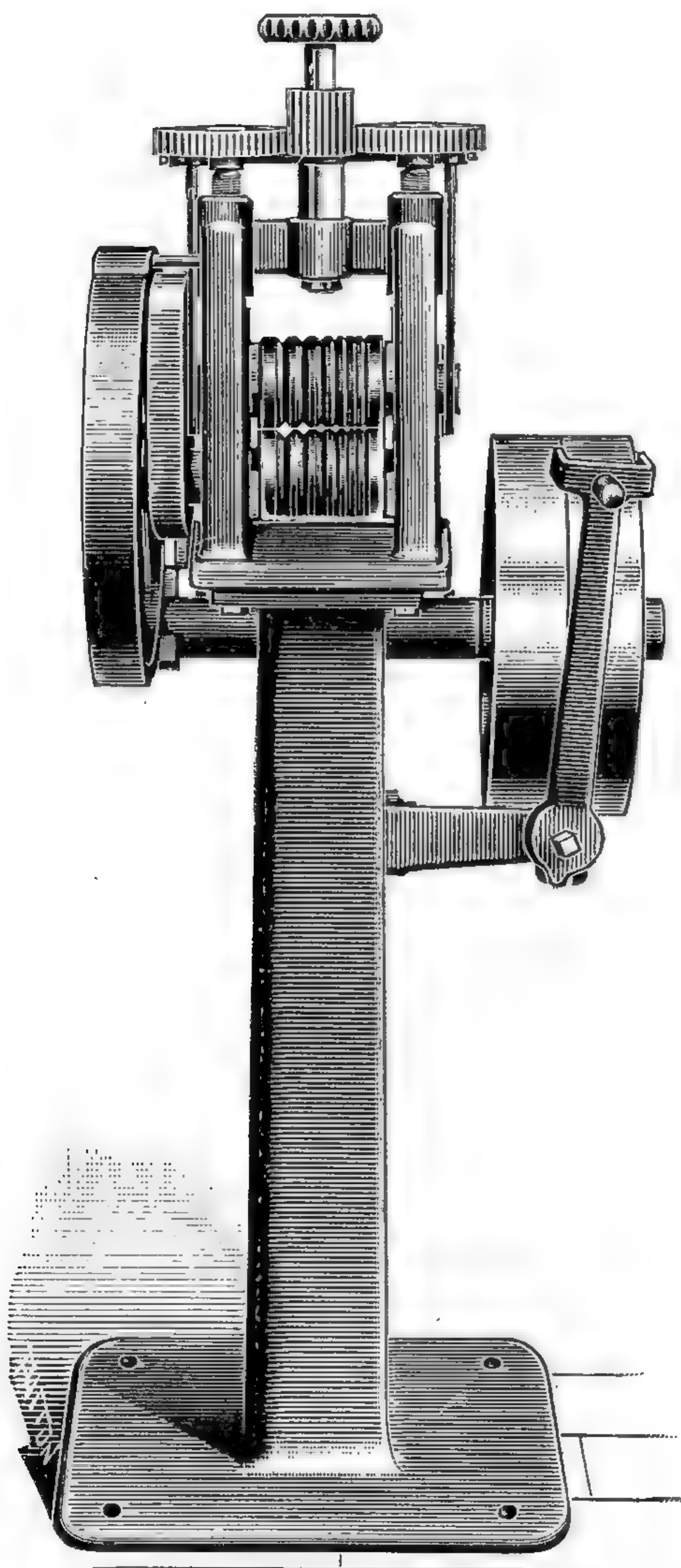
Dimensions — " " 53" x 22" x 22".

For extra rolls, see pages 18 and 19.

OLIVER



QUALITY



NOS. 3 AND 4 DOUBLE-GEARED POWER ROLLING
MILLS, SQUARE WIRE ROLLS



Improved Double-Geared Power Rolling Mills

WITH SQUARE WIRE ROLLS

The Gears are machine cut from solid stock, and are completely covered. Ratio of gearing: No. 3, $5\frac{1}{2}$ to 1; No. 4, $6\frac{1}{3}$ to 1.

The tight and loose pulleys are 12" in diameter for $2\frac{1}{4}$ " belt, and should run about 150 revolutions per minute.

No. 3—(Falser). Price, \$95.00.

Rolls — $2\frac{1}{4}$ " diam. x 3" long.

Floor Space — 18" x 18".

Net Weight — 190 lbs.

Gross " — Domestic Shipment, about 250 lbs.

" " — Foreign " 300 "

Dimensions — " " 50" x 20" x 20".

No. 4—(Fangot). Price, \$120.00.

Rolls — $2\frac{3}{4}$ " diam. x 4" long.

Floor Space — 20" x 20".

Net Weight — 250 lbs.

Gross " — Domestic Shipment, about 320 lbs.

" " — Foreign " 360 "

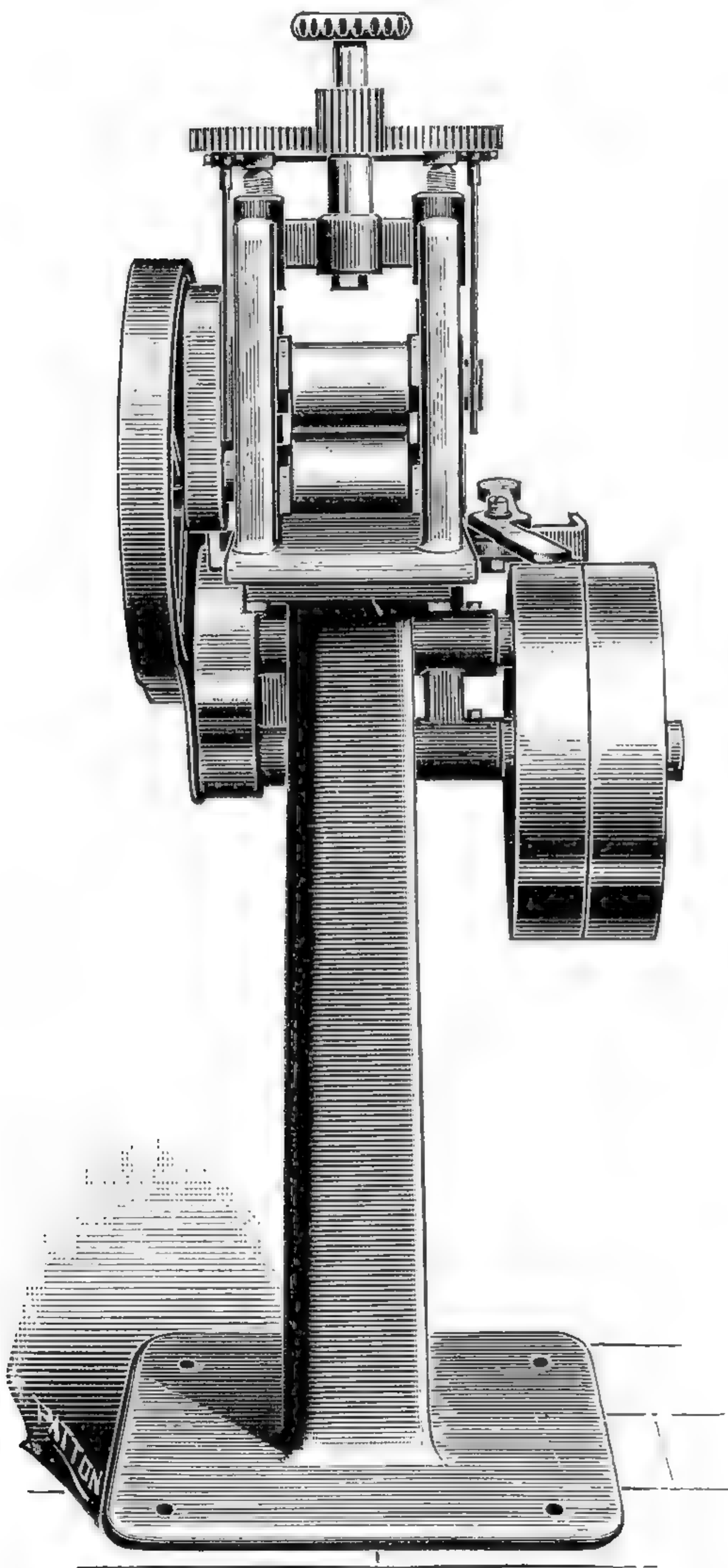
Dimensions — " " 53" x 22" x 22".

For extra rolls, see pages 18 and 19.

OLIVER



QUALITY



No. 4 TRIPLE-GEARED POWER ROLLING MILL,
FLAT ROLLS



Improved Triple-Geared Power Rolling Mills

WITH FLAT ROLLS

The No. 4 T. G. Power Rolling Mill is an ideal rolling mill for the small manufacturing jeweler, whose floor space is very limited.

The Rolls are easily interchangeable.

The Gears on the rolls are connected by means of two idler gears in the rear, and all four gears have spiral-cut teeth. This insures perfectly smooth work in the stock rolled. All gearing is completely covered; ratio, 11 to 1.

The Tight and Loose pulleys are 12" in diameter for $2\frac{1}{4}$ " belt, and should run about 300 revolutions per minute.

No. 4 — (Fanion). Price, \$140.00.

Rolls — $2\frac{3}{4}$ " diam. x 4" long.

Floor Space — 22" x 22".

Net Weight — 305 lbs.

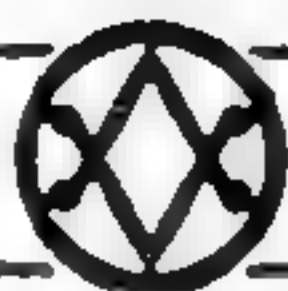
Gross " — Domestic Shipment, about 400 lbs.

" " — Foreign " 450 "

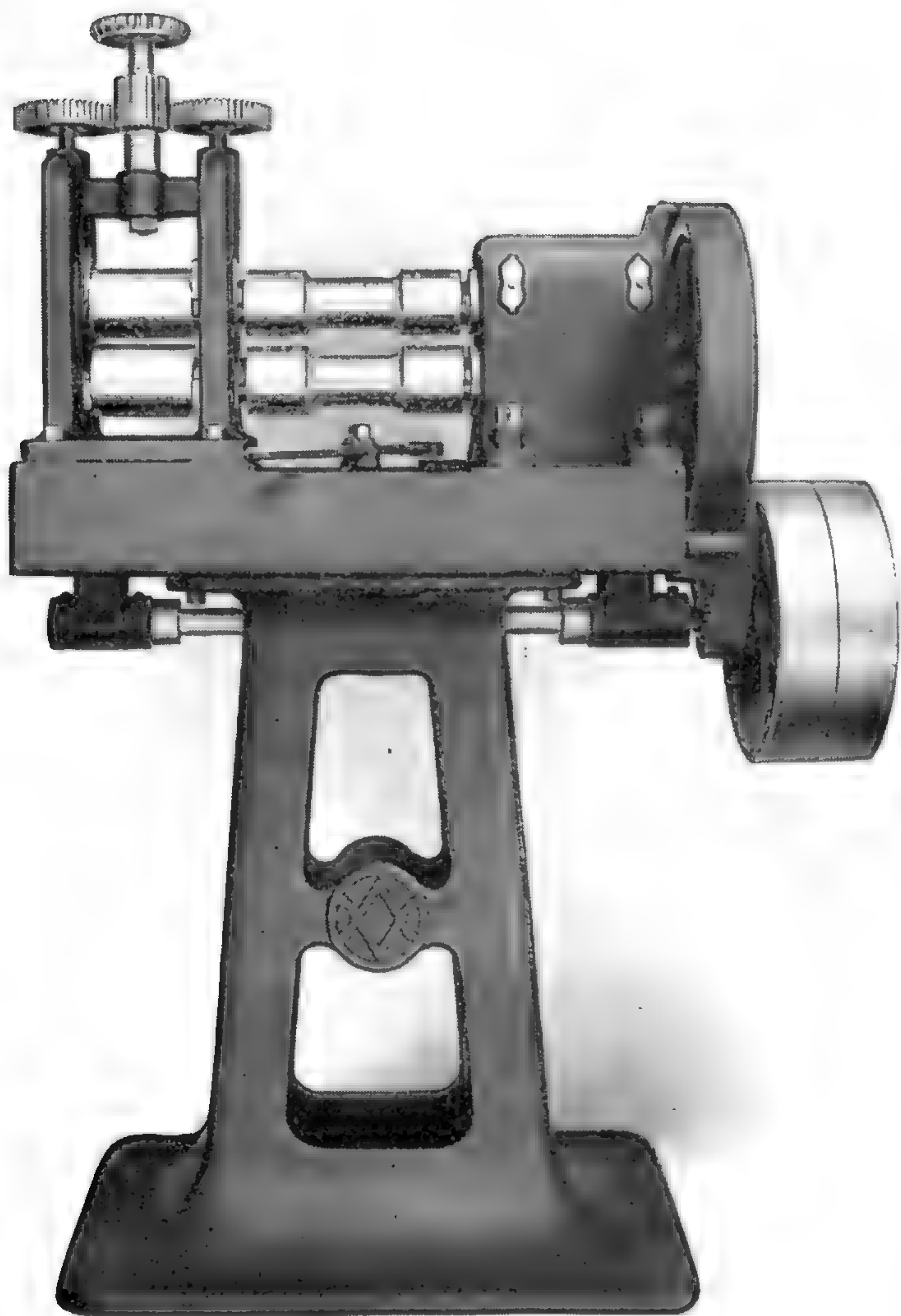
Dimensions — " " 53" x 24" x 24".

For extra rolls, see pages 18 and 19.

OLIVER



QUALITY



NO. 4A TRIPLE-GEARED POWER ROLLING MILL,
FLAT ROLLS



Improved Triple-Geared Power Rolling Mills

WITH TOGGLE CONNECTIONS AND FLAT ROLLS

The No. 4A T. G. Power Rolling Mill, the newest addition to the Oliver Quality line of Rolling Mills, is an unusually powerful machine, designed to meet the severest requirements.

An absolute uniform motion of the rolls, essential for the production of perfectly smooth stock, is obtained by the use of toggle connections.

The Rolls are easily interchangeable, and are ground and lapped to a mirror finish.

The Tight and Loose pulleys are 12" in diameter for 2 $\frac{1}{4}$ " belt, and should run about 300 revolutions per minute.

No. 4A — (Figment). Price, \$175.00.

Rolls — 2 $\frac{3}{4}$ " diam. x 4" long.

Floor Space — 20" x 30".

Ratio of Gearing — 14 to 1.

Net Weight — 540 lbs.

Gross " — Domestic Shipment, about 640 lbs.

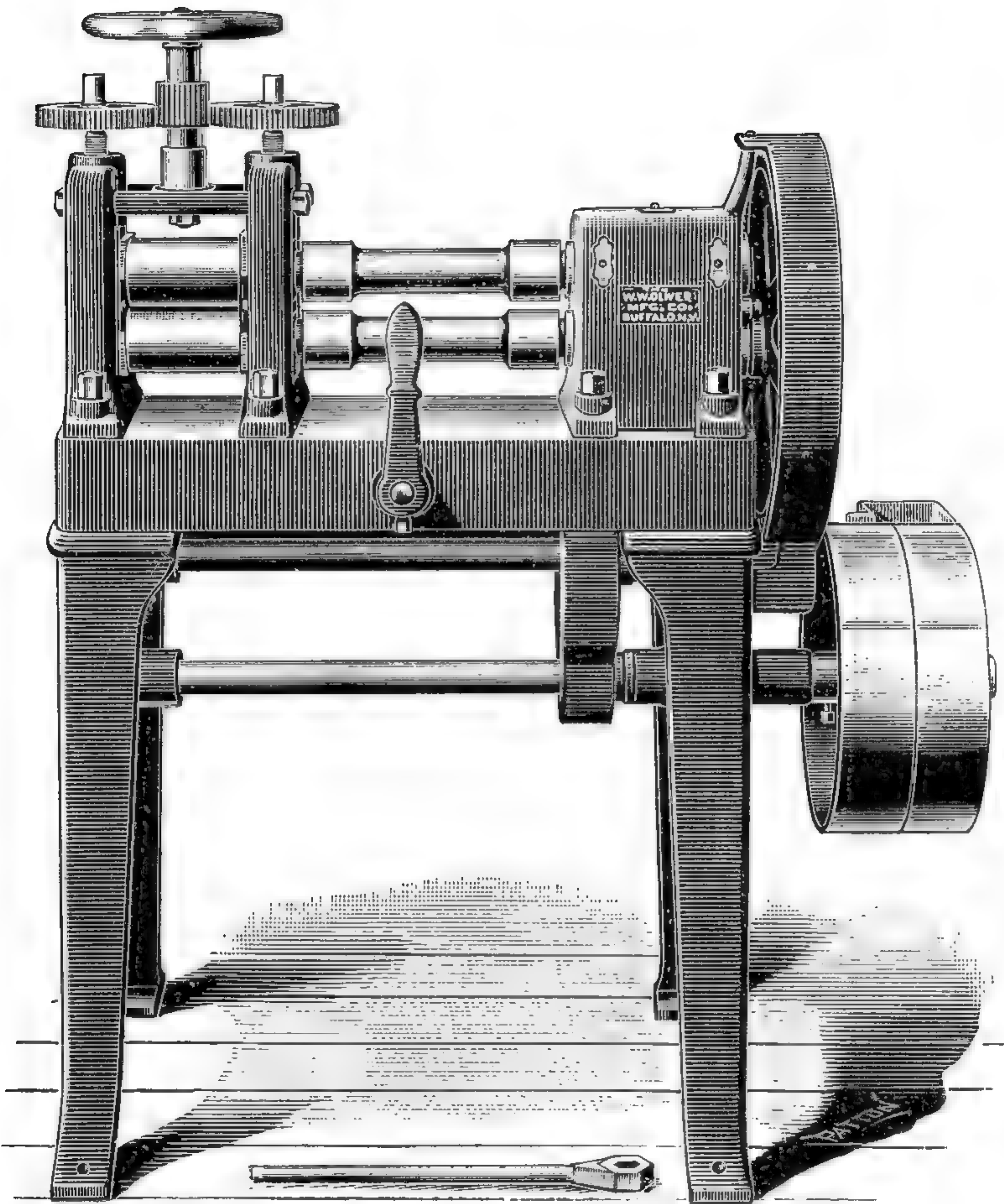
" " — Foreign " 800 "

Dimensions — " " 52" x 32" x 22".

OLIVER



QUALITY



Nos. 5, 6, AND 8 TRIPLE-GEARED POWER
ROLLING MILLS



Improved Triple-Geared Power Rolling Mills

WITH TOGGLE CONNECTIONS AND FLAT ROLLS

These Rolling Mills are heavy and well proportioned, and are adapted both for breaking down and for finishing.

The Rolls are made of an extra quality tool steel, and are ground and lapped to a mirror finish.

The Pulleys should run about 300 revolutions per minute.

No. 5 — (Fardel). Price, \$250.00.

Rolls — 3" diam. x 5" long.

Floor Space — 23" x 41".

Pulleys — 14" diam. for 2 $\frac{3}{4}$ " belt.

Ratio of Gearing — 16 $\frac{1}{2}$ to 1.

Net Weight — 688 lbs.

Gross " — Domestic Shipment, about 800 lbs.

" " — Foreign " " 925 "

Dimensions — " " 49" x 37" x 25".

No. 6 — (Farlies). Price, \$375.00.

Rolls — 4" diam. x 6" long.

Floor Space — 25" x 54".

Pulleys — 18" diam. for 3 $\frac{1}{4}$ " belt.

Ratio of Gearing — 17 $\frac{1}{2}$ to 1.

Net Weight — 1,315 lbs.

Gross " — Domestic Shipment, about 1,468 lbs.

" " — Foreign " " 1,695 "

Dimensions — " " 61" x 58" x 27".

No. 8 — (Florin). Price, \$550.00.

Rolls — 5" diam. x 8" long.

Floor Space — 27" x 60".

Pulleys — 22" diam for 4" belt.

Ratio of Gearing — 18 to 1.

Net Weight — 2,600 lbs.

Gross " — Domestic Shipment, about 2,888 lbs.

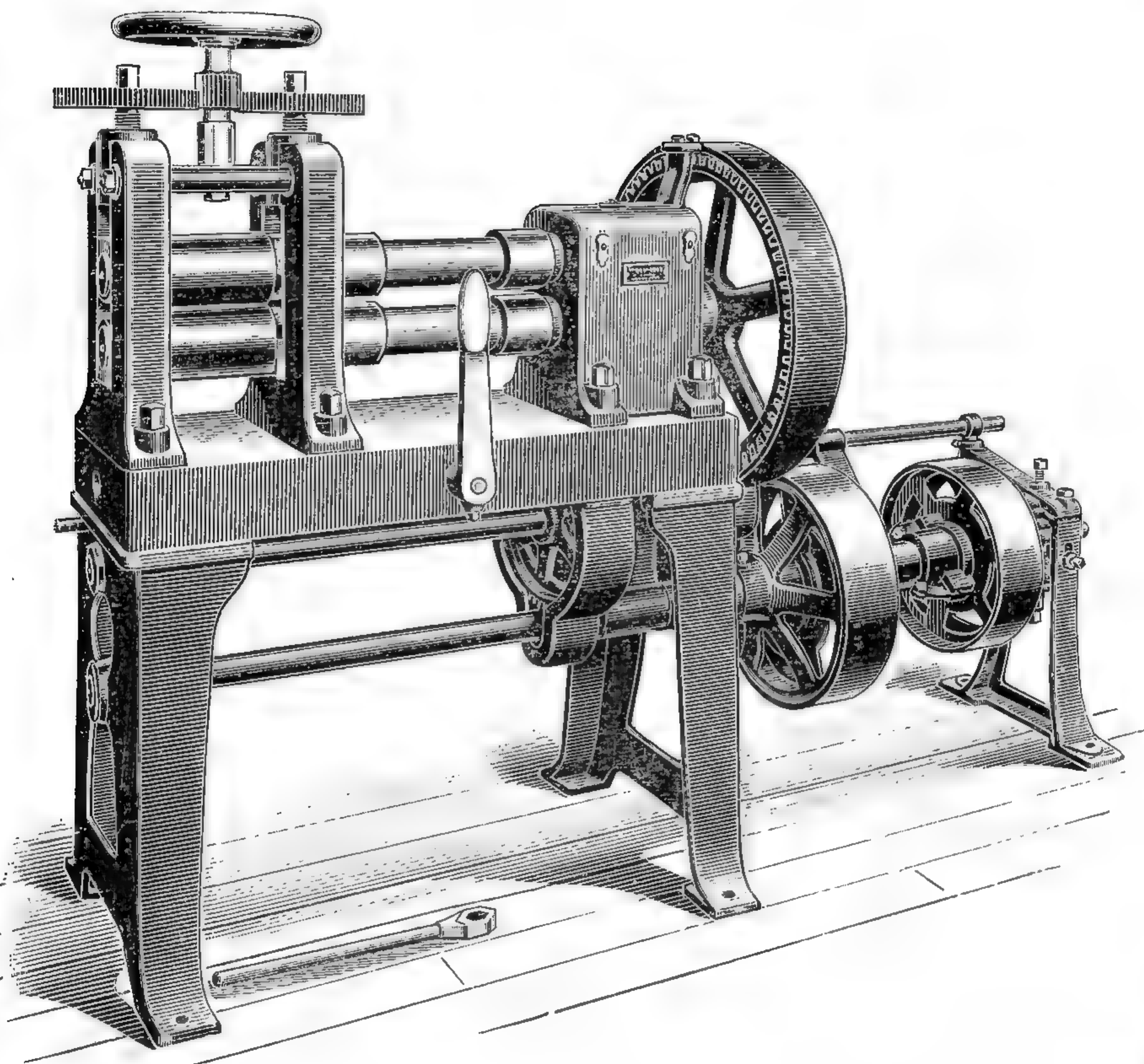
" " — Foreign " " 3,466 "

Dimensions — " " 71" x 68" x 30".

OLIVER



QUALITY



Nos. 5, 6, AND 8 REVERSING ROLLING MILLS



Improved Triple-Geared Power Reversing Rolling Mills

WITH TOGGLE CONNECTIONS AND FLAT ROLLS

The Nos. 5, 6, and 8 Reversing Rolling Mills and the Nos. 5, 6, and 8 T. G. Power Rolling Mills are identical in design and construction, with the exception of an addition of a suitable reversing device to the former.

No. 5 — (Frigate). Price, \$325.00.

Rolls — 3" diam. x 5" long.

Floor Space — 23" x 60".

Pulleys — 10" x 3" and 12" x 3½".

Ratio of Gearing — 16½ to 1.

Net Weight — 780 lbs.

Gross " — Domestic Shipment, about 892 lbs.

" " — Foreign " 1,080 "

Dimensions — " " 68" x 37" x 25".

No. 6 — (Fresco). Price, \$450.00.

Rolls — 4" diam. x 6" long.

Floor Space — 25" x 75".

Pulleys — 12" x 3½" and 14" x 4".

Ratio of Gearing — 17½ to 1.

Net Weight — 1,423 lbs.

Gross " — Domestic Shipment, about 1,645 lbs.

" " — Foreign " 1,810 "

Dimensions — " " 78" x 54" x 27".

No. 8 — (Fracas). Price, \$650.00.

Rolls — 5" diam. x 8" long.

Floor Space — 27" x 83".

Pulleys — 14" x 4" and 16" x 4½".

Ratio of Gearing — 18 to 1.

Net Weight — 2,767 lbs.

Gross " — Domestic Shipment, about 3,127 lbs.

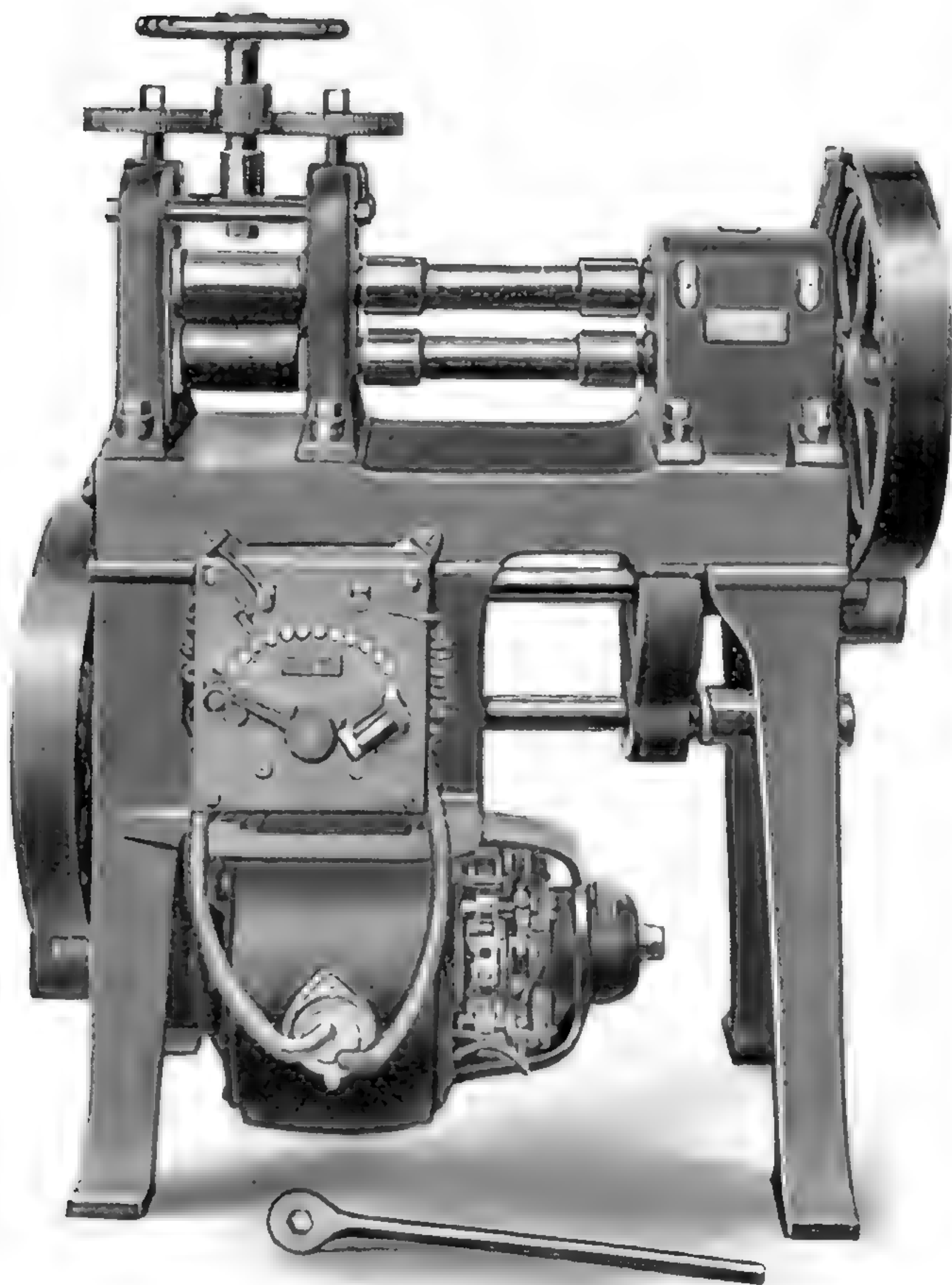
" " — Foreign " 3,700 "

Dimensions — " " 94" x 68" x 30".

OLIVER



QUALITY



NOS. 5, 6, AND 8 TRIPLE-GEARED POWER ROLLING
MILLS, DIRECT CONNECTED ELECTRIC MOTOR
DRIVEN



Improved Triple-Geared Power Rolling Mills

**DIRECT-CONNECTED ELECTRIC MOTOR DRIVEN
WITH TOGGLE CONNECTIONS AND
FLAT ROLLS**

The Modern Method of driving machinery, particularly rolling mills, by means of direct-connected electric motors shows many points of superiority when compared to the old method of drive belts and countershafts from a line shaft.

The Motor Drive is more economical. There is no power used when the machine is idle, and there is none wasted in driving belts, countershafts, and line shafts.

Rolling Mills driven by direct-connected electric motors will produce better work, as the speed of the rolls is constant, not being affected by the slipping of belts.

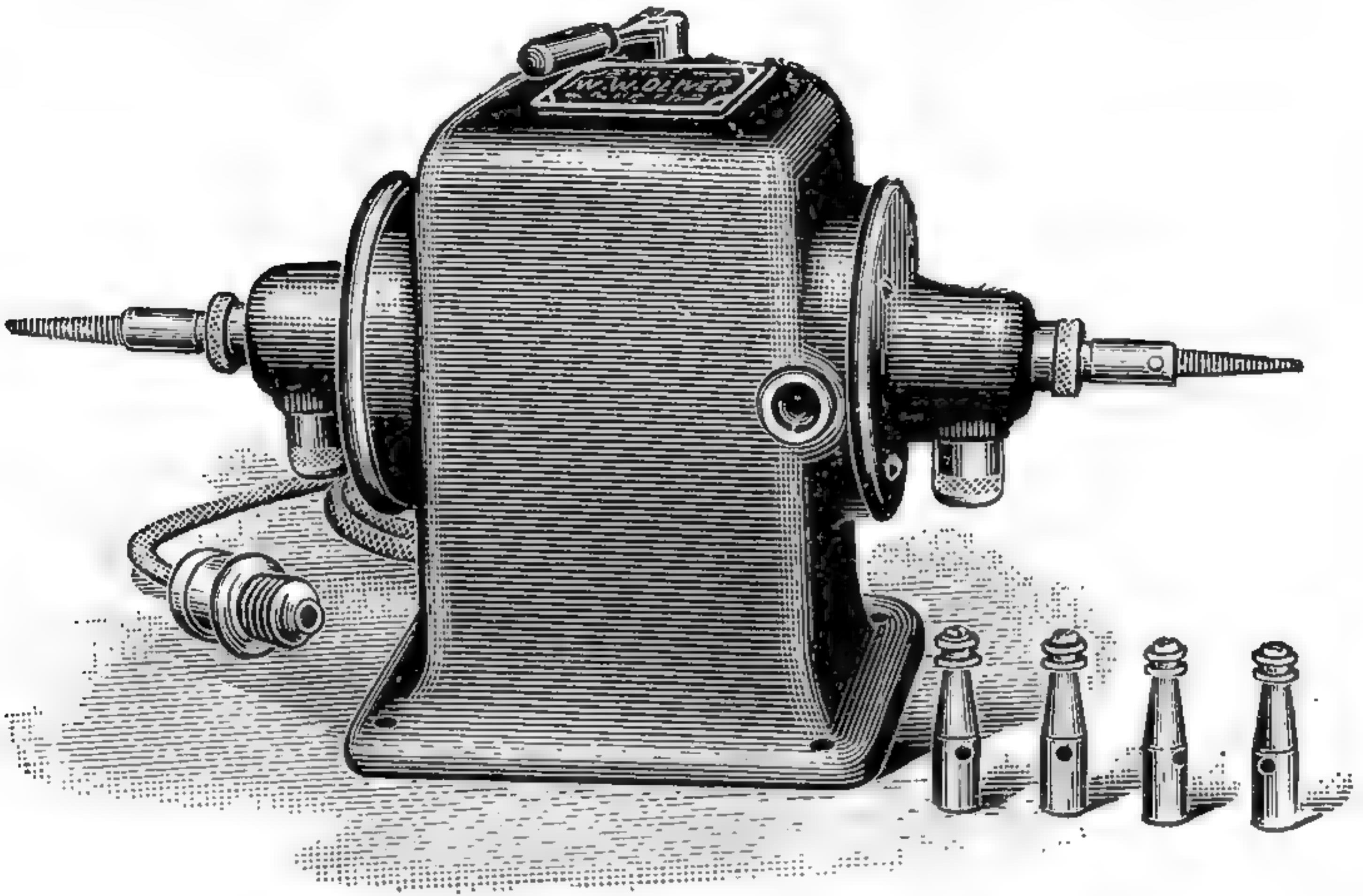
The Oliver Quality line of electric motor-driven rolling mills embody all of the superior qualities of the belt-driven mills, together with the advantages of the motor-driven type.

Prices Quoted on Application

In order for us to quote intelligently, it is necessary for us to know the voltage of the electric current you would use, whether it would be direct or alternating, and number of cycles and phases, if alternating.



Electric Motor Polishing Heads for Direct Current



TYPE "A," $\frac{1}{6}$ HORSE POWER

This Motor was designed for the dental profession. It has four speeds.

The Bearings of all our motors are large and carefully made. They are automatically supplied with oil circulating by a wick feed, giving perfect lubrication.

110 Volts (Ichor). Price, \$36.00.

220 " (Ideal). " 40.00.

Total Height — 9 $\frac{1}{2}$ ".

Height to Center of Spindle — 5".

Length of Spindle, including two Brush Chucks — 20".

Approximate Speeds, 1,000, 1,500, 2,000, 2,500 revolutions per minute.

Net Weight — 45 lbs.

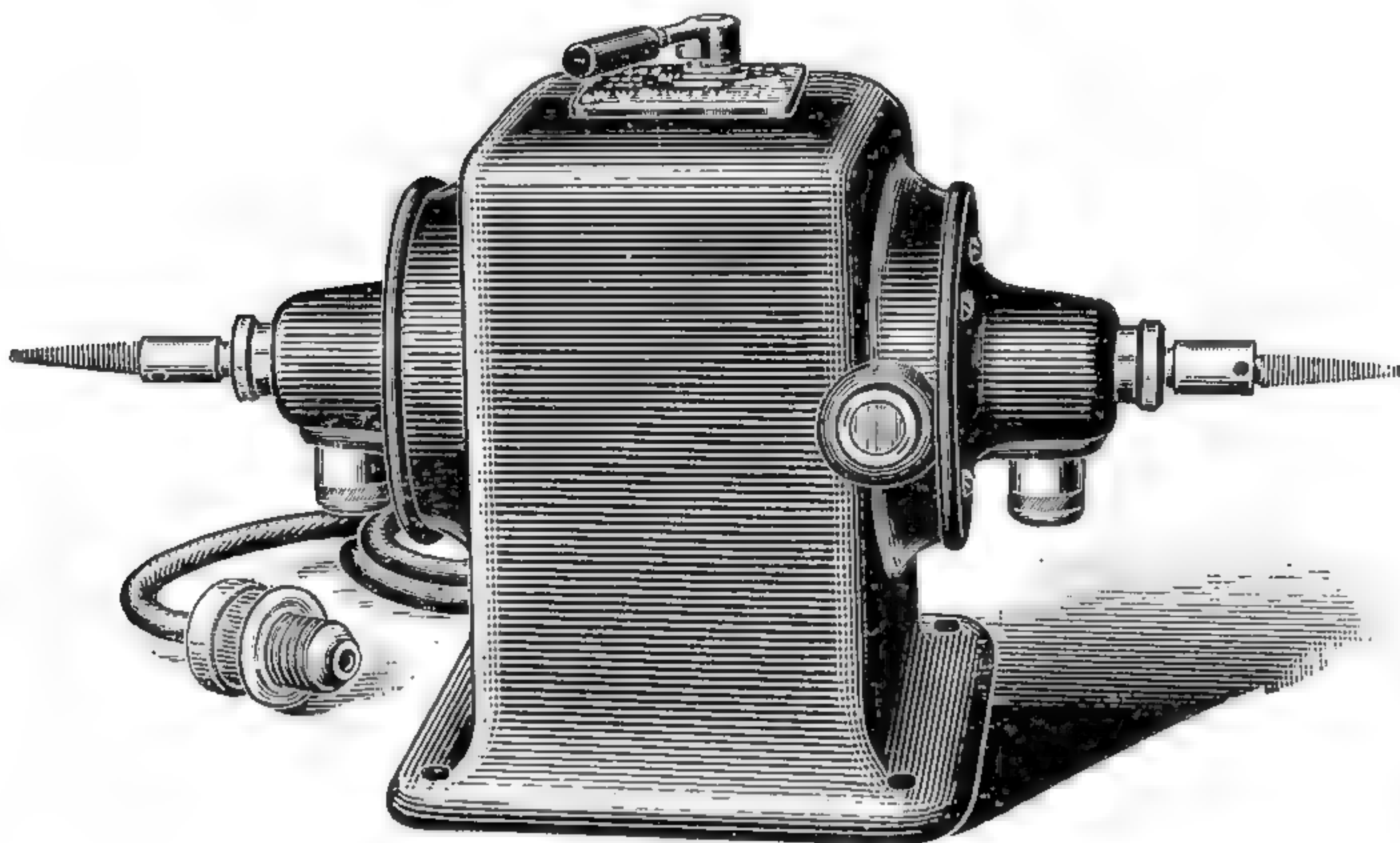
Weight Boxed — 60 lbs.

Dimensions Box — 20" x 12" x 9".

Prices above include two Brush Chucks and four Wheel Chucks. For extra Chucks, etc., see page 47.



Electric Motor Polishing Heads for Direct Current



TYPE "A," $\frac{1}{5}$ HORSE POWER

Our whole line of Motor Heads has been greatly improved, and our product is equal, if not superior, to that of any of our competitors. Each head is carefully tested, and is guaranteed to develop the full horse power as given.

110 Volts (Ignite). Price, \$32.00.

220 " (Idiom). " 36.00.

Total Height — $9\frac{1}{2}$ ".

Height to Center of Spindle — 5".

Length of Spindle, including two Brush Chucks — 20".

Approximate Speeds, 2,000 and 3,000 revolutions per minute.

Net Weight — 45 lbs.

Weight Boxed — 60 lbs.

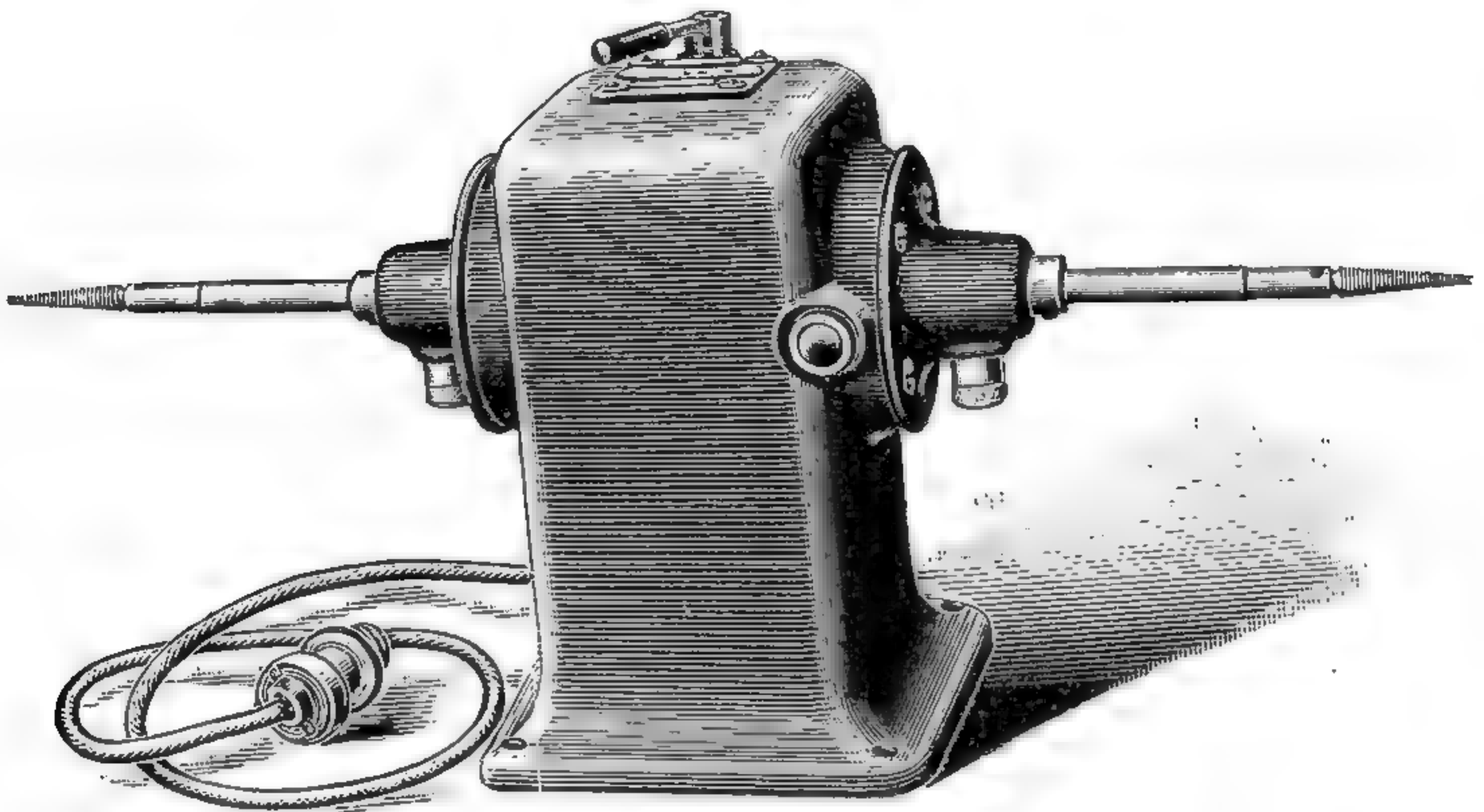
Dimensions Box — 20" x 12" x 9".

Prices above include only the two Brush Chucks.

For extra Chucks, etc., see page 47.



Electric Motor Polishing Heads for Direct Current



TYPE "A," $\frac{1}{4}$ HORSE POWER.

The highest grade of materials are used in the construction of our motors. The commutators, a vital part of the motor, are made of hard bar copper (not cast stock), and are thoroughly insulated.

The carbon brushes are of the best quality, and can be easily removed for inspection or renewal.

110 Volts (Ibex). Price, \$48.00.

220 " (Imitate). " 53.00.

Total Height — 13".

Height to Center of Spindle — 8".

Length of Spindle, including two Brush Chucks — 24".

Approximate Speeds, 3,000 revolutions per minute.

Net Weight — 60 lbs.

Weight Boxed — 85 lbs.

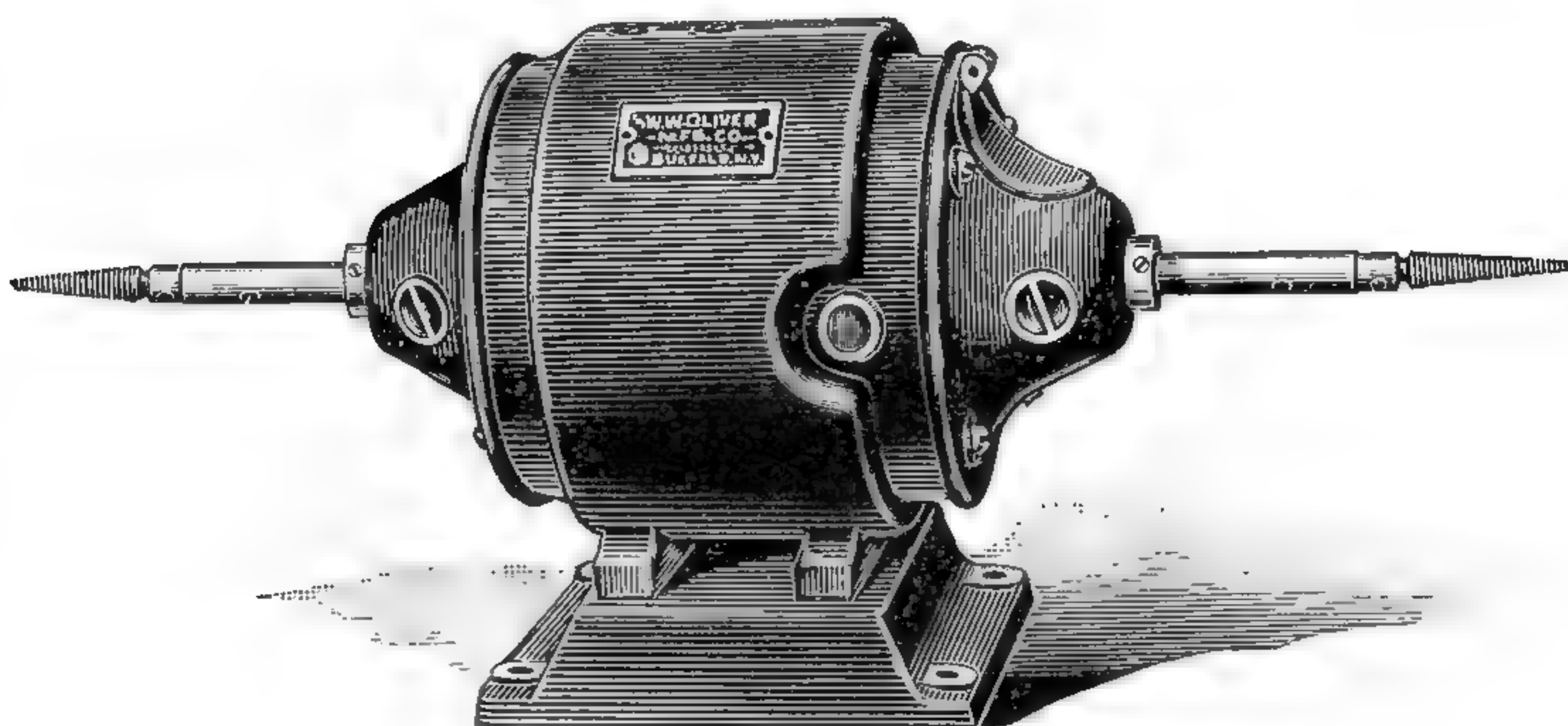
Dimensions Box — 22" x 15" x 11".

Prices above include only the two Brush Chucks.

For extra Chucks, etc., see page 47.



Electric Motor Polishing Heads for Direct Current



TYPE "B," $\frac{1}{2}$ HORSE POWER

The Type "B" motors are of an exceptionally sturdy design, fulfilling the requirements of manufacturing jewelers, silversmiths, hotels, etc. They have ample power for use with cotton buffs up to eight inches in diameter.

A starting rheostat with an automatic no-voltage release is furnished with each motor.

110 Volts (Isagon). Price, \$70.00.

220 " (Iterate). " 75.00.

Total Height — $13\frac{1}{2}$ ".

Height to Center of Spindle — 8".

Length of Spindle, including two Brush Chucks — 36".

Approximate Speed, 3,000 revolutions per minute.

Net Weight — 160 lbs.

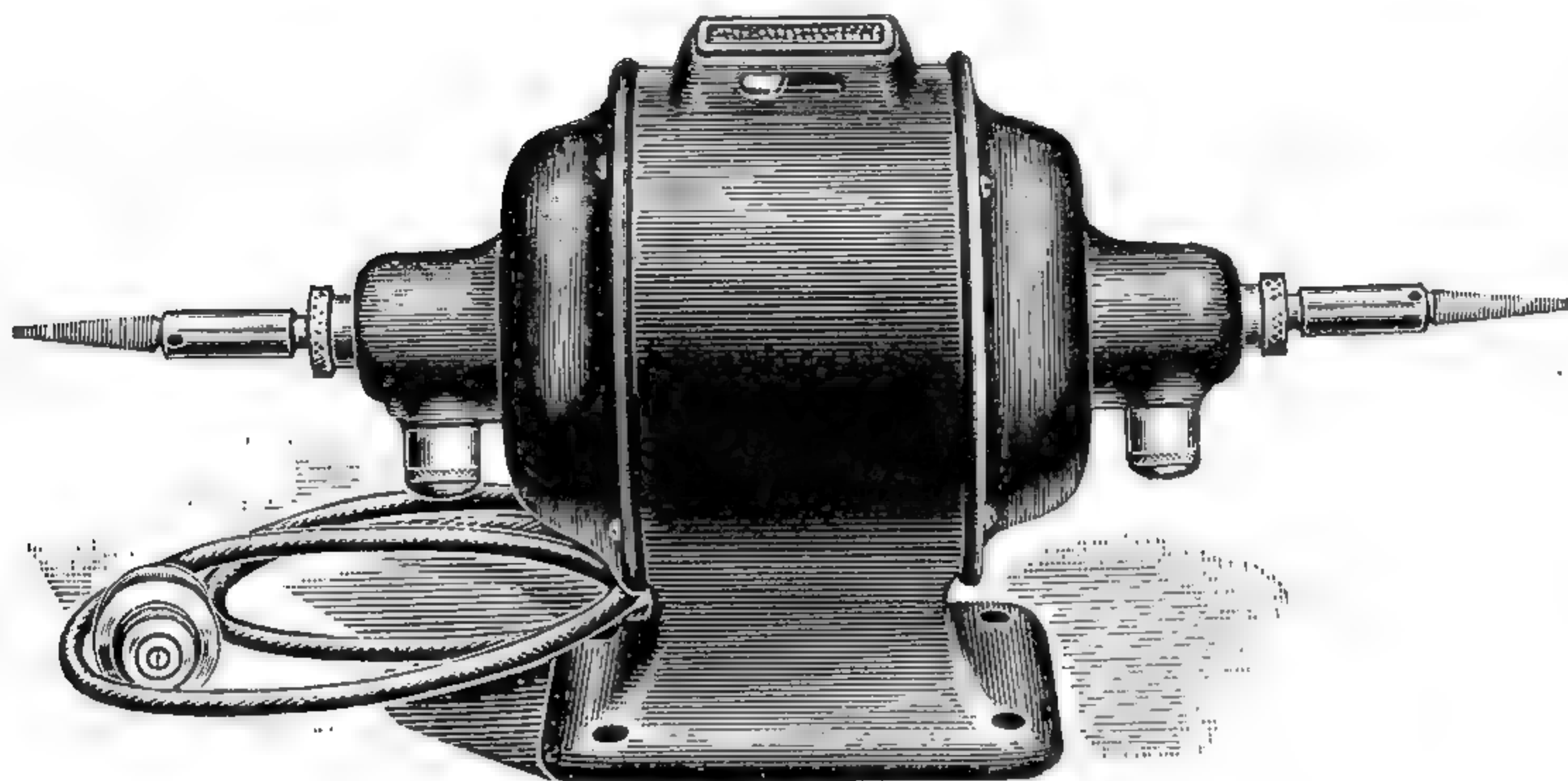
Weight Boxed — 195 lbs.

Dimensions Box — 36" x 16" x 14".

Prices above include only the two Brush Chucks and a Starting Rheostat. For extra Chucks, etc., see page 47



Electric Motor Polishing Heads for Alternating Current



TYPE "K," $\frac{1}{6}$ HORSE POWER

This is an induction motor having no brushes or commutator to require your attention. With a proper supply of oil in the cups, which feed to the bearings automatically, as in our other motors, this type of motor will always be found in good running order.

110 Volts	60 cycles (Idly).	Price, \$46.00.
220 "	60 " (Idol).	" 48.00.
110 "	133 " (Inert),	" 46.00.
220 "	133 " (Infuse).	" 48.00.

Total Height — 9".

Height to Center of Spindle — 5".

Length of Spindle, including two Brush Chucks — 20".

Approximate Speed, 3,400 revolutions per minute.

Net Weight — 37 lbs.

Weight Boxed — 50 lbs.

Dimensions Box — 20" x 11" x 10".

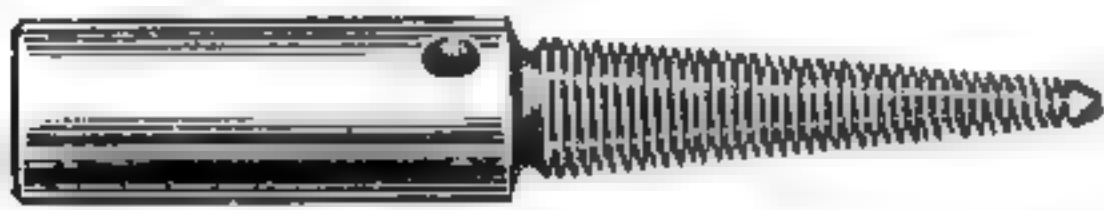
Prices above include only the two Brush Chucks.

For extra Chucks, etc., see page 47.



Chucks, Etc.

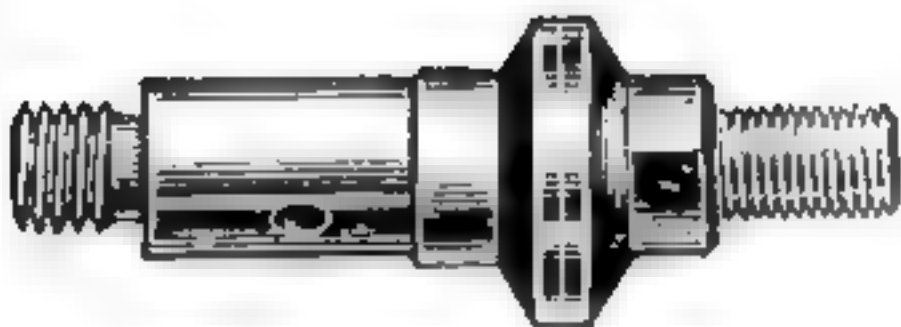
USED WITH ANY OF OUR 1-6 AND 1-5
HORSE-POWER MOTORS



Right Brush Chuck, \$1.00
Left Brush Chuck, 1.00



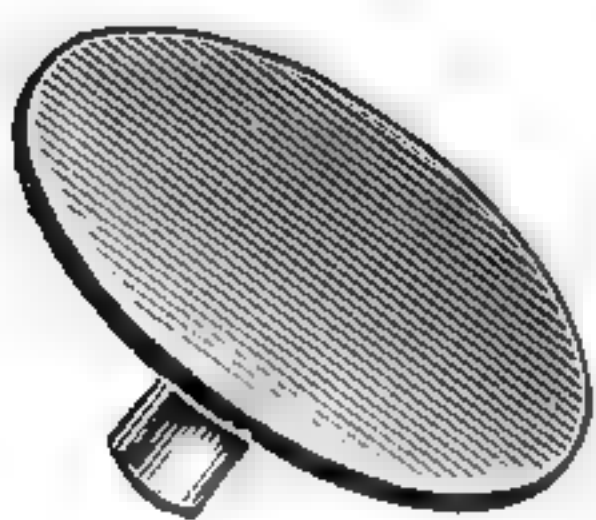
Right or Left	$\frac{3}{16}$ "	Wheel Chuck,	1.00
"	$\frac{1}{4}$ "	"	1.00
"	$\frac{5}{16}$ "	"	1.00
"	$\frac{3}{8}$ "	"	1.00



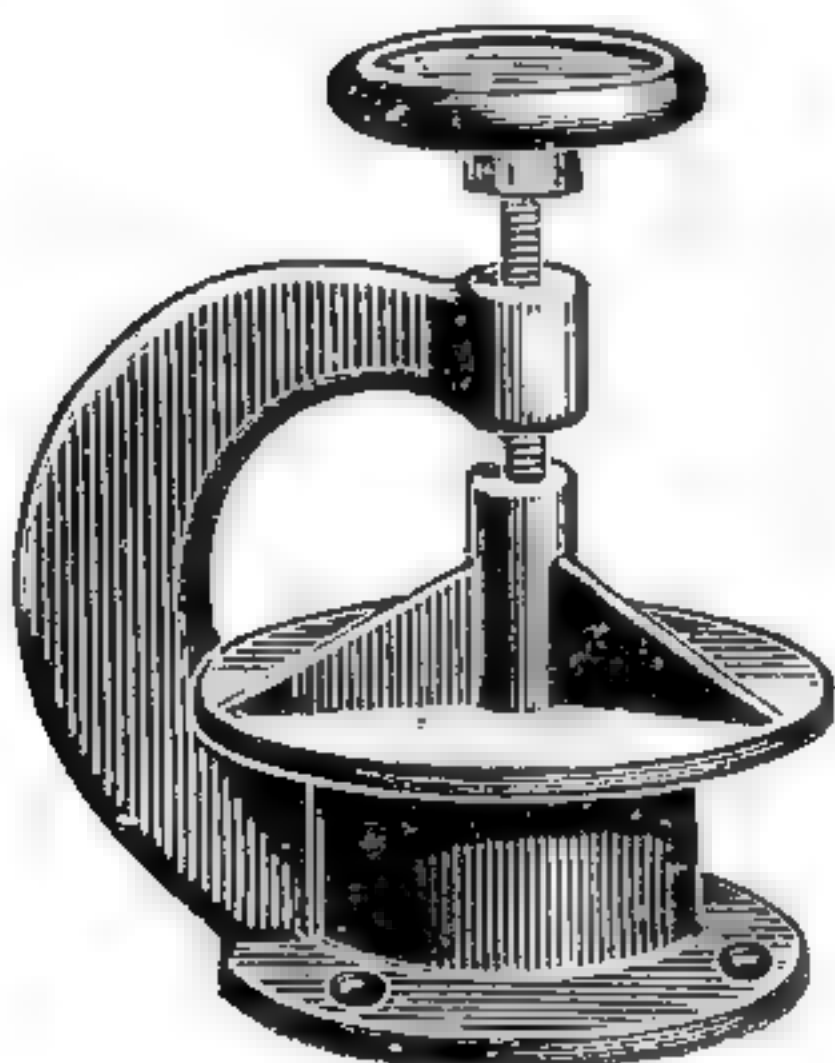
Right $\frac{3}{8}$ -inch Emery Wheel
Chuck, $\frac{1}{4}$ H. P. Motor, 1.00
Right $\frac{5}{8}$ -inch Metal Lap Chuck,
 $\frac{1}{4}$ H. P. Motor, 1.50



Left Plain Grooved Pulley, for
direct current motors, 1.00
Grooved Clutch Pulley, for alter-
nating current motors, 4.00



Right Mounted Disc Chuck, 1.00
Carborundum Cloth Discs, asso.,
per dozen,25
Carborundum Paper Discs, asso.,
per dozen,12
Cement, per can,20



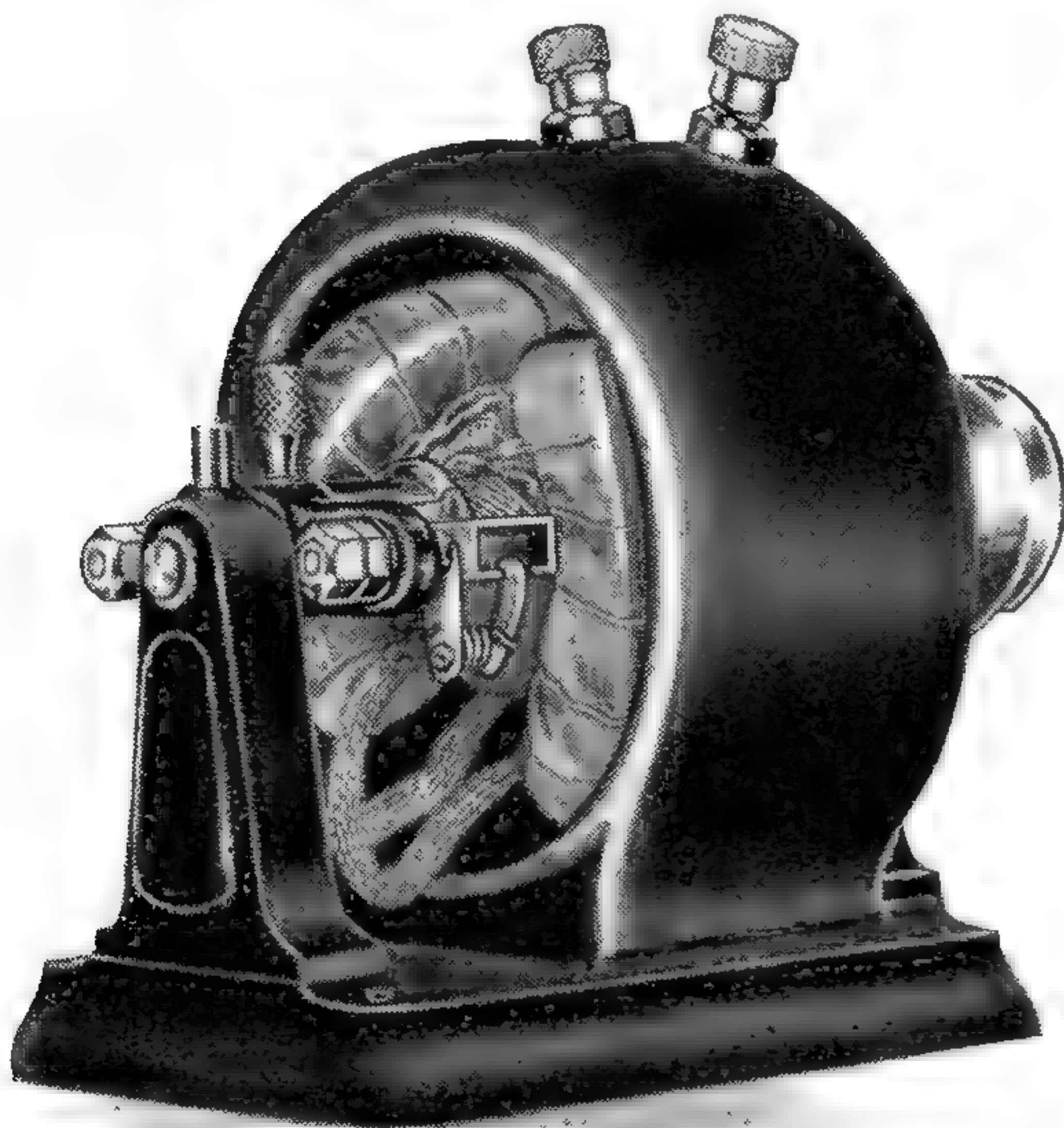
Screw Press, for mounting discs, .80

By the use of this tool, discs may be
mounted very quickly and easily.

SPECIAL CHUCKS TO ORDER



No. 1 Plating Dynamo



The Oliver Quality Plating Dynamo No. 1 represents the highest development in the design of small plating dynamos sold at a low price. It has many features found only in the larger and higher-priced machines.

The Field Coils are form-wound and are carefully insulated.

The Armature core is built up of steel laminations, which insures the dynamo against heating and the subsequent loss of power.

The Commutator is an improvement over the commutator usually found on machines of this character. It is built up of drawn copper segments, carefully insulated by mica from each other and from the shaft. This construction helps eliminate sparking, and is conducive of very smooth running.

The Brush Holders are of an improved type. They are very simple and durable, and are adjustable for regulation. The brushes are built up of copper gauze.

The Bearings are of bronze and are lubricated by dust-proof oilers.

This machine is furnished complete with pulley ready for operation, and will develop eight amperes at five volts at 2,000 revolutions per minute.

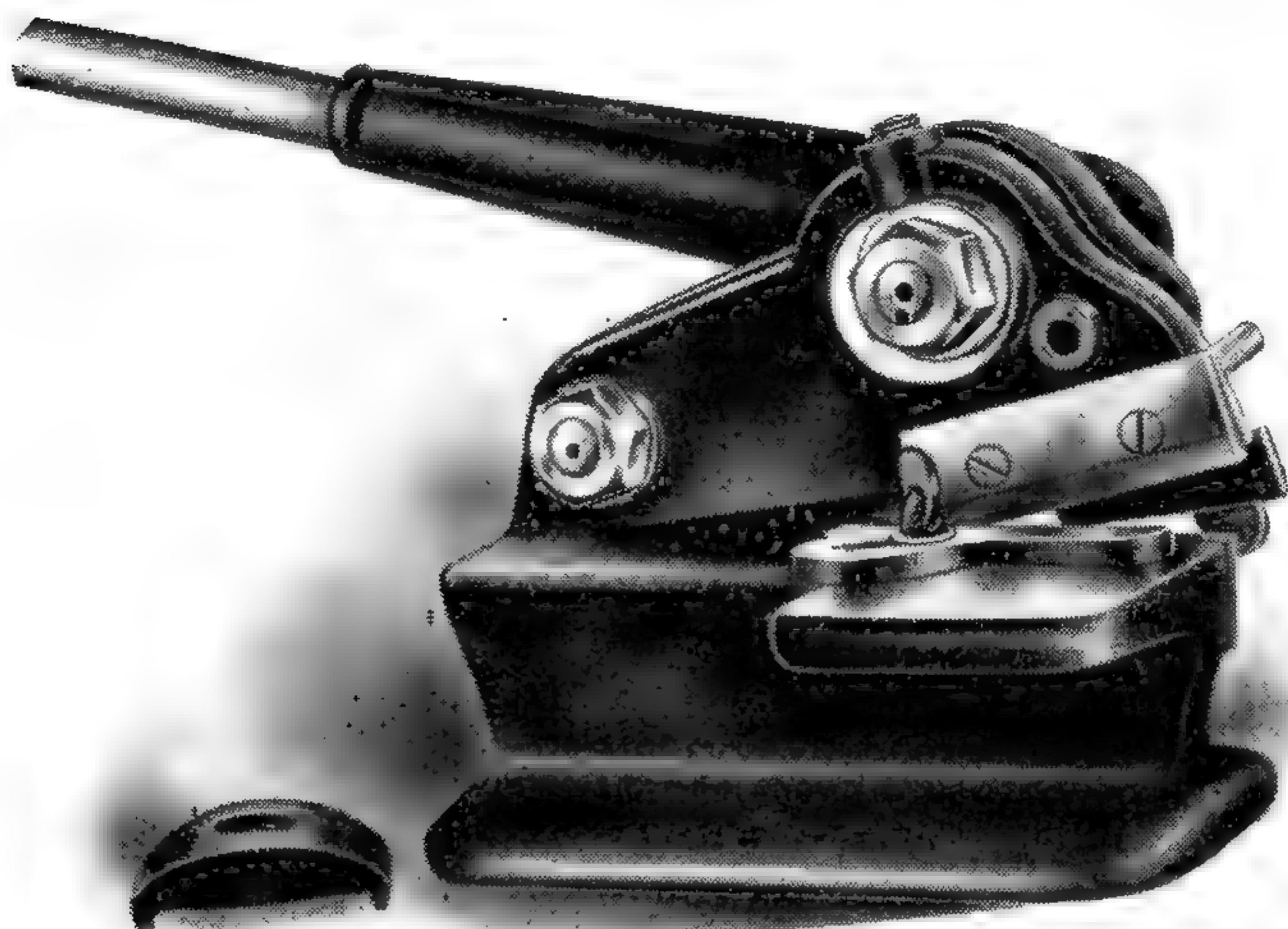
Price (Involute), \$8.00.

Weight — 10 lbs.

Rheostat to regulate current (Involve) — \$1.00.



No. 1 Bench Shear and Rod Cutter



Every factory in the metal trades could use one or more of these shears to advantage. They are powerful, durable, and low in cost. The movement of the cutting jaw is obtained by an eccentric shaft on which there is a hardened steel roller working against a hardened steel block in the jaw.

One extra pair of blades, two gauges, and one clamp for holding down short pieces are furnished with each shear.

No. 1 — Price (Harnous), \$15.00.

“ Blades, per pair (Hances), \$0.75.

Length of Blades — 3”.

Capacity in flat iron thickness, $\frac{1}{8}$ ”.

“ in rods diameter, $\frac{5}{16}$ ”.

Net Weight — 20 lbs.

Weight Boxed — About 30 lbs.

Dimensions Box — 16” x 10” x 8”.

OLIVER

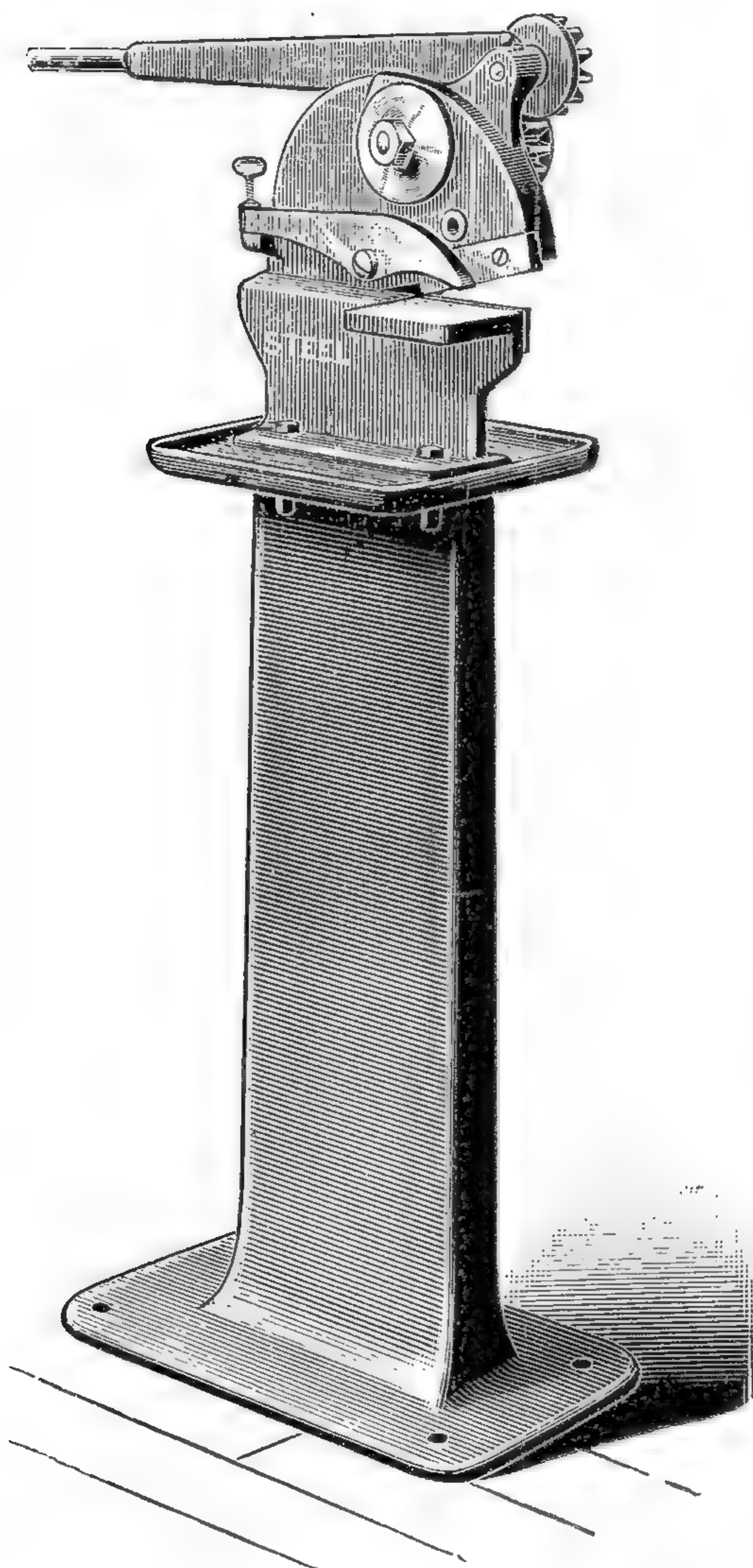


QUALITY



No. 1½ IMPROVED METAL SHEAR AND ROD CUTTER

For description and price, see page 52.



No. 2 IMPROVED METAL SHEAR AND ROD CUTTER

For description and price, see page 52.



Improved Metal Shears and Rod Cutters

Our Improvement consists of a hardened steel roller on an eccentric shaft, moving over a hardened steel block, thus reducing the friction to a minimum.

The Bodies are made of steel castings, and the working parts of steel and malleable iron. One extra pair of blades is furnished with each shear.

No. 1 $\frac{1}{2}$ — Price (Harm), \$18.00.

Price, Blades per pair (Hances), \$0.75.

Length of Blades — 3".

Maximum Capacity in flat iron thickness, $\frac{3}{16}$ ".

" " " iron rod diameter, $\frac{5}{16}$ ".

Net Weight — 25 lbs.

Weight Boxed — 35 lbs.

Dimensions Box — 20" x 10" x 7".

No. 2 — Price, without Column (Haste), \$22.50.

" with " (Hasty). 27.00.

" Blades, per pair (Hatch), 1.00.

Length of Blades — 4".

Maximum Capacity in flat iron thickness, $\frac{1}{4}$ ".

" " " iron rod diameter, $\frac{3}{8}$ ".

Net Weight — 107 lbs.

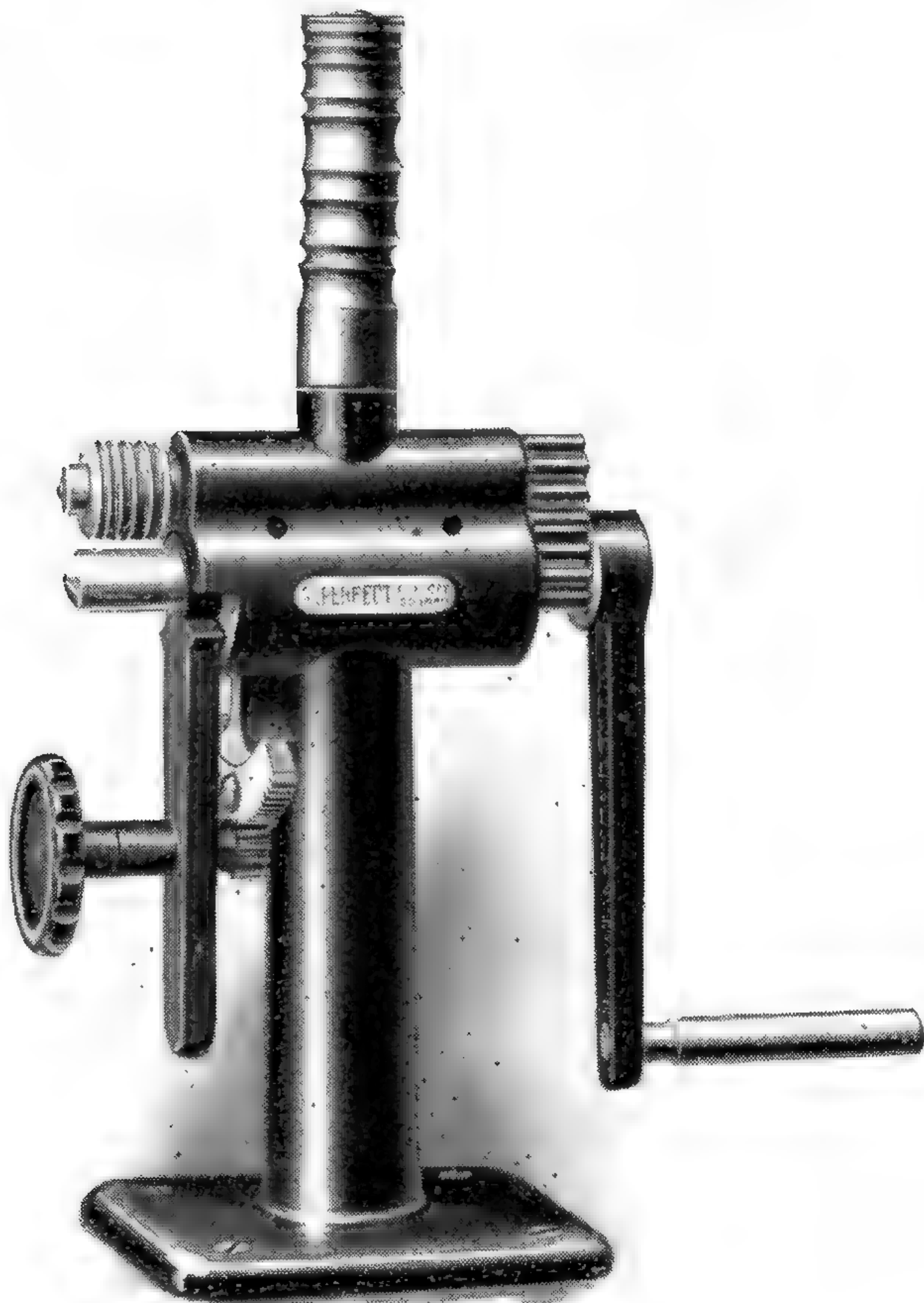
Gross " — Domestic Shipment, about 125 lbs.

" " — Foreign " 155 "

Dimensions — " " 43" x 19" x 12".



The "Perfect" Ring Stretcher



Each stretcher is provided with six hardened and highly-polished steel rolls. These are illustrated in full size on page 54.

The one flat roll is for use on plain flat or band rings, the other five rolls are grooved for plain oval rings of different weight and sizes, together with grooves for the Tiffany and set rings.

Price (Huch), \$10.00.

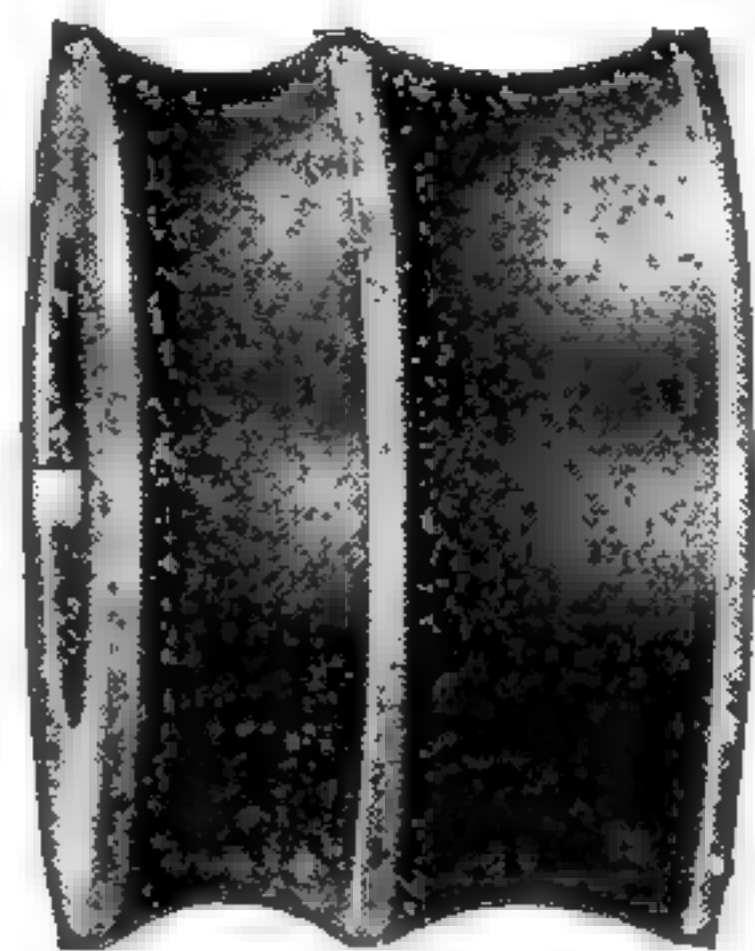


Size of Rolls

WITH WIDTH AND DEPTH OF GROOVES
IN INCHES



No. 1
For Flat Rings.



No. 4
.25 x .033
.30 x .040



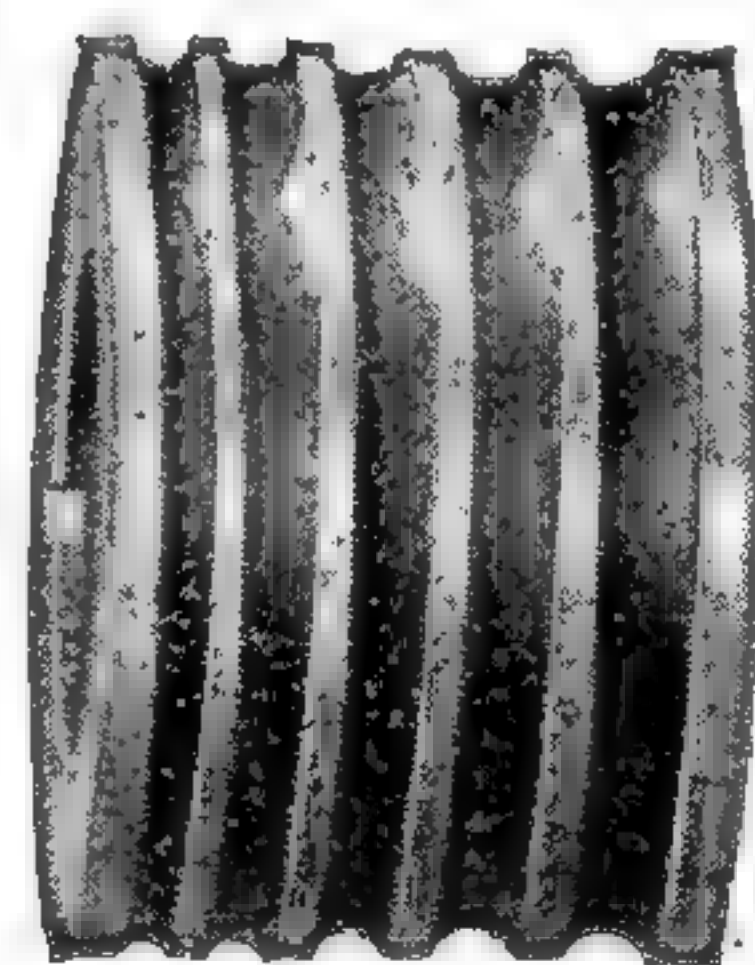
No. 2
.12 x .055
.40 x .053



No. 5
.10 x .013
.15 x .020
.20 x .026



No. 3
.16 x .075
.35 x .046

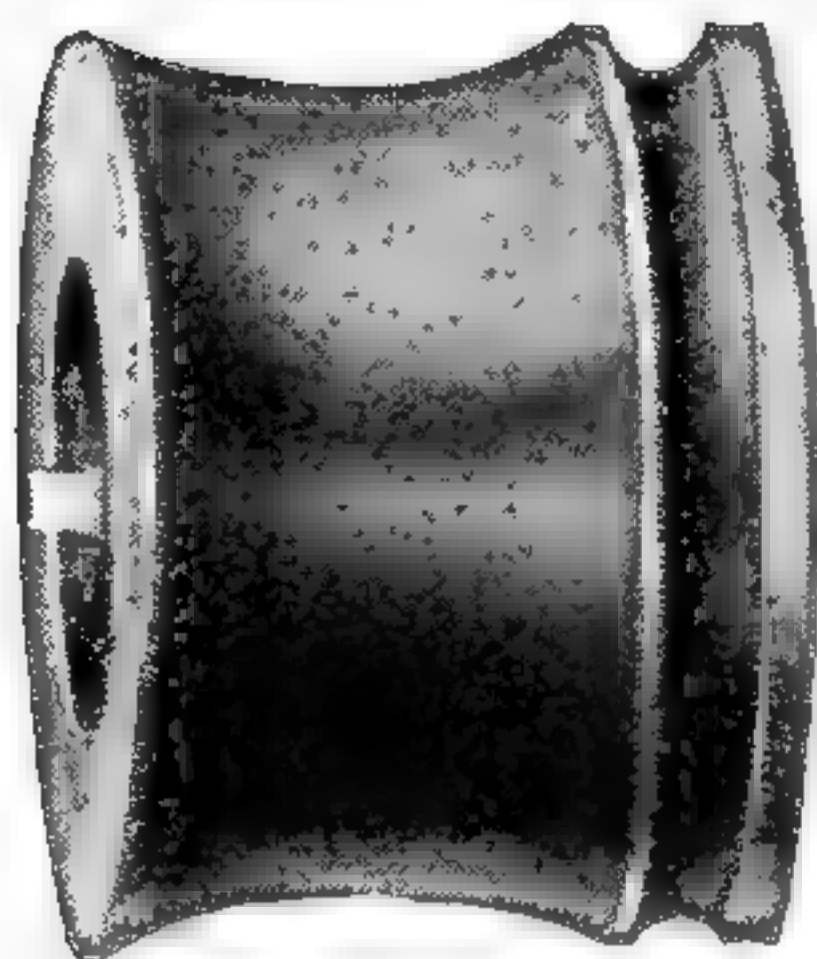


No. 6
.12 x .025
.105 x .025
.09 x .025
.075 x .025
.06 x .025

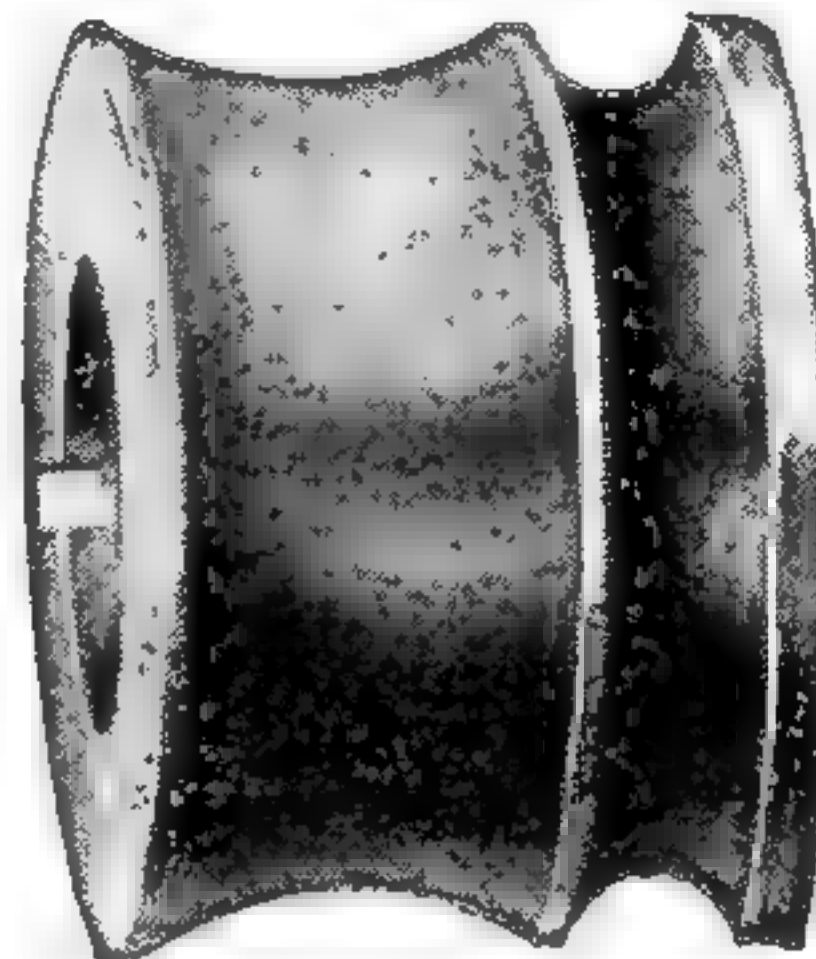
Stock Rolls as above, separate (Huckle), . . . \$0.50 each.
Special Rolls to order, single grooves,75 "
Extra Grooves in same roll,25 "

Size of Extra Rolls

WITH WIDTH AND DEPTH OF GROOVES
IN INCHES



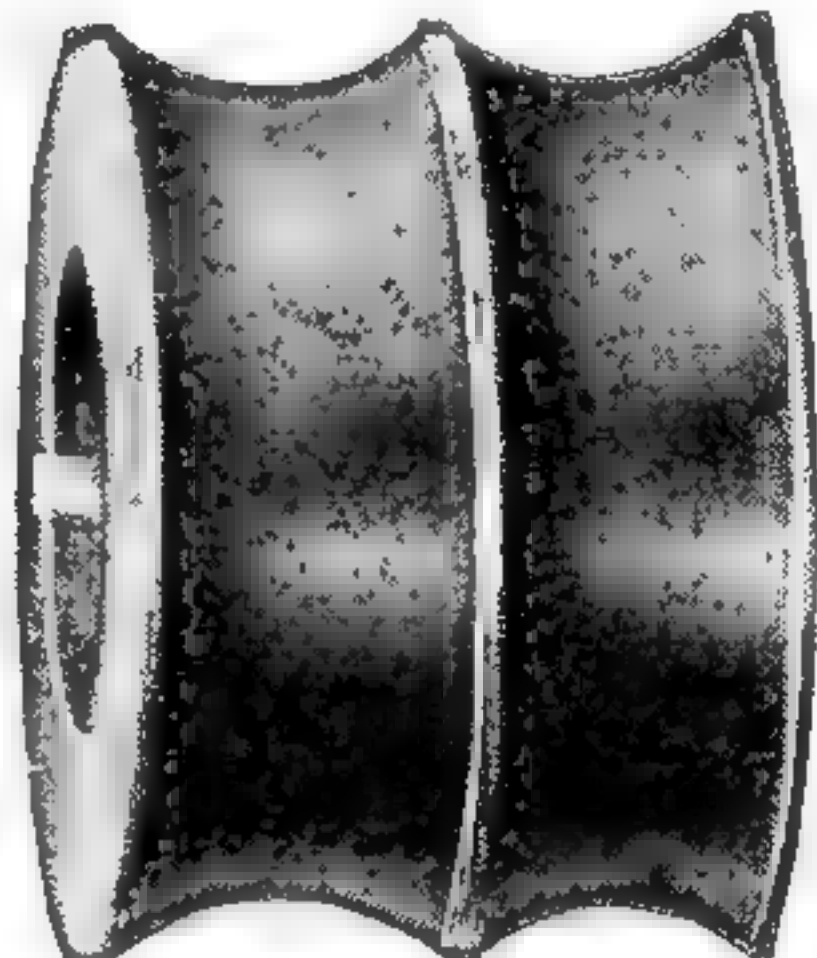
No. 7
.45 x .030
.08 x .035



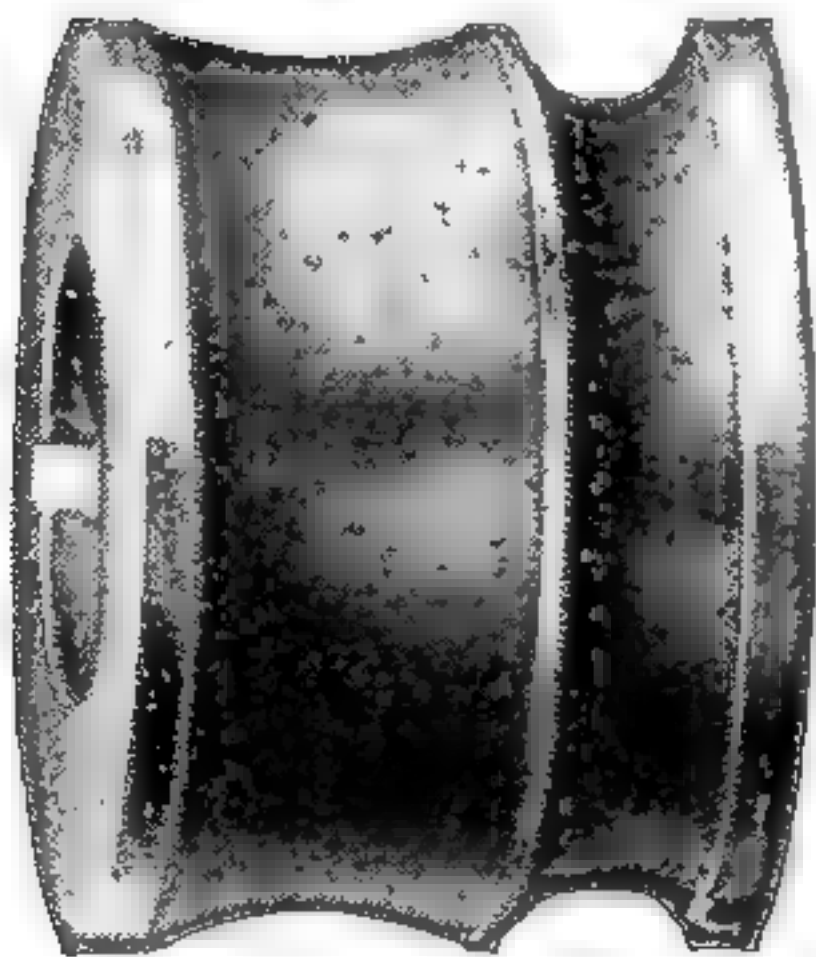
No. 10
.30 x .025
.18 x .070



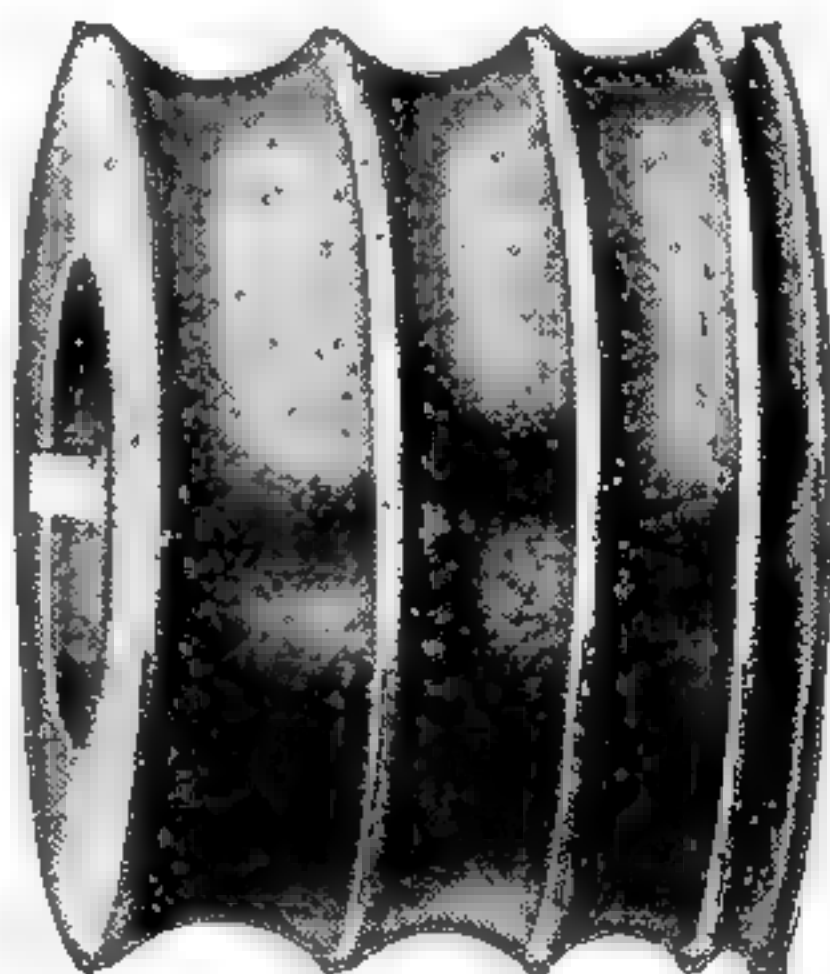
No. 8
.40 x .030
.10 x .045



No. 11
.30 x .060
.25 x .050



No. 9
.35 x .025
.14 x .060

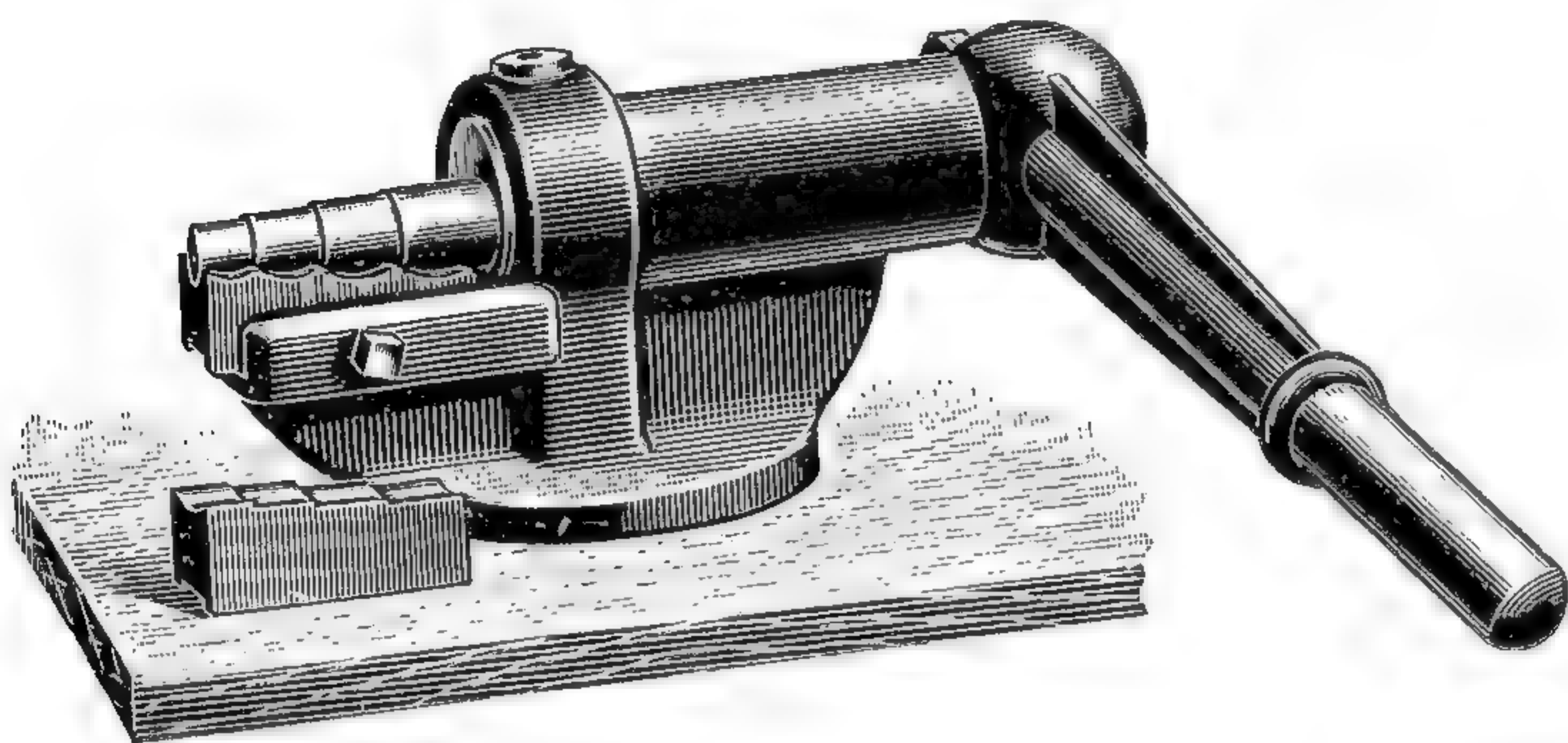


No. 12
.20 x .050
.16 x .040
.12 x .030

Stock Rolls as above, separate (Huckle), . . . \$0.50 each.



The “Little Giant” Ring Bender



This Machine is adapted for the bending of both half-round, flat, and chased rings, and will do the work better, and in one-tenth part of the time usually consumed in this work.

It is needless to say that we have received from all parts of the world numerous unsolicited testimonials demonstrating the merits of this machine.

Price (Humor) — \$10.00.

Net Weight — 10 lbs.

Weight Boxed — 13 lbs.



Mandrels

Hardened Graduated Mandrels

Price, single (Hose), \$2.00

These Mandrels are made of fine crucible steel, graduated to the *Allen "Standard,"* hardened, and finely polished.

Taper Ring Mandrels

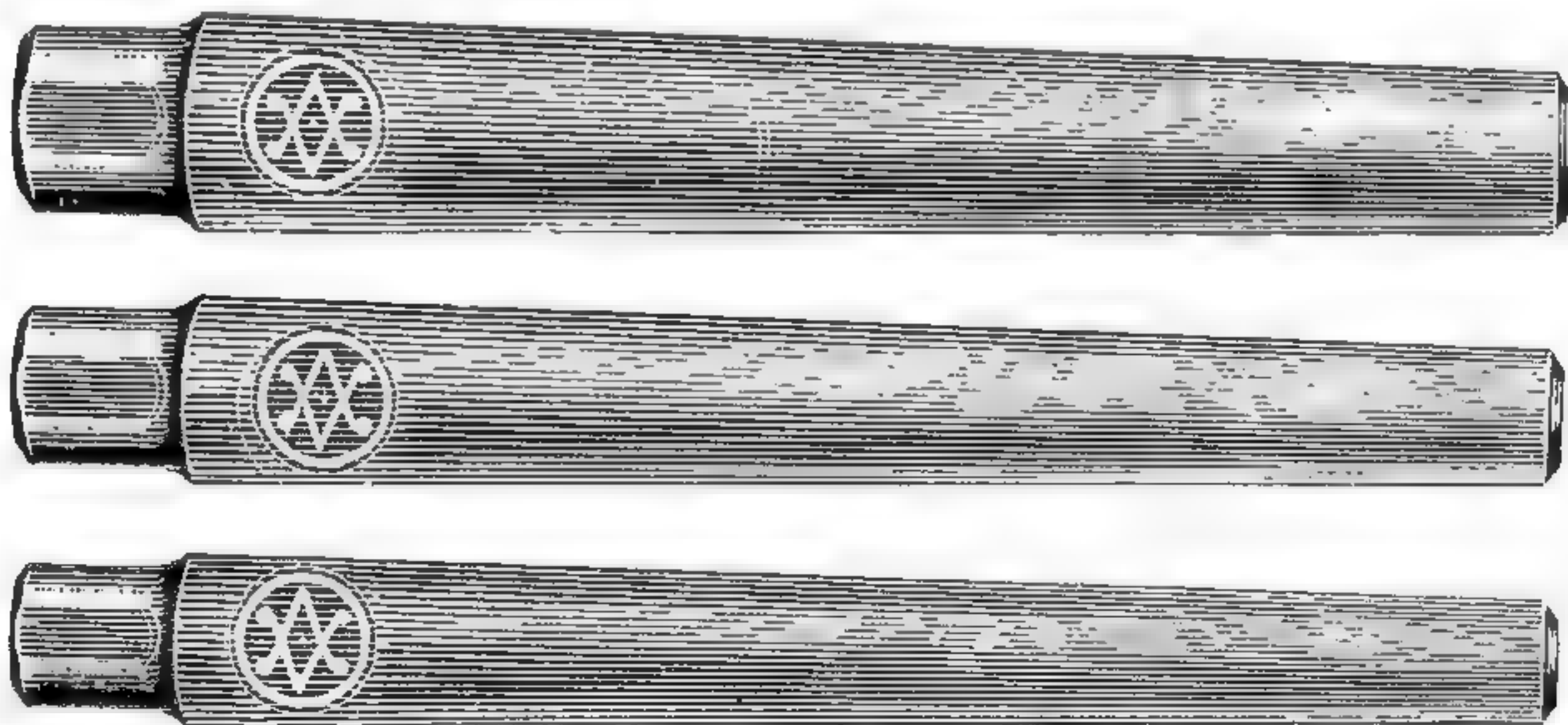
SOFT STEEL

Length	Taper		Single		Per Doz.
14"	$\frac{1}{2}$ " to 1"	(Hot),	\$1.00	(Hum).	\$12.00
12"	$\frac{3}{8}$ " "	$\frac{3}{4}$ " (Hote),	.90	(Hump),	10.00
10"	$\frac{1}{4}$ " "	$\frac{1}{2}$ " (Hoten),	.80	(Humph),	9.00
8"	$\frac{3}{16}$ " "	$\frac{3}{8}$ " (Hotch),	.70	(Hunt),	8.00

Lathe Ring Mandrels

Single Mandrel (Hurry),	Price, \$2.00
Full set of three (Hurt),	" 5.00
Lathe Dog, to carry Mandrels (Hurst), "	.40

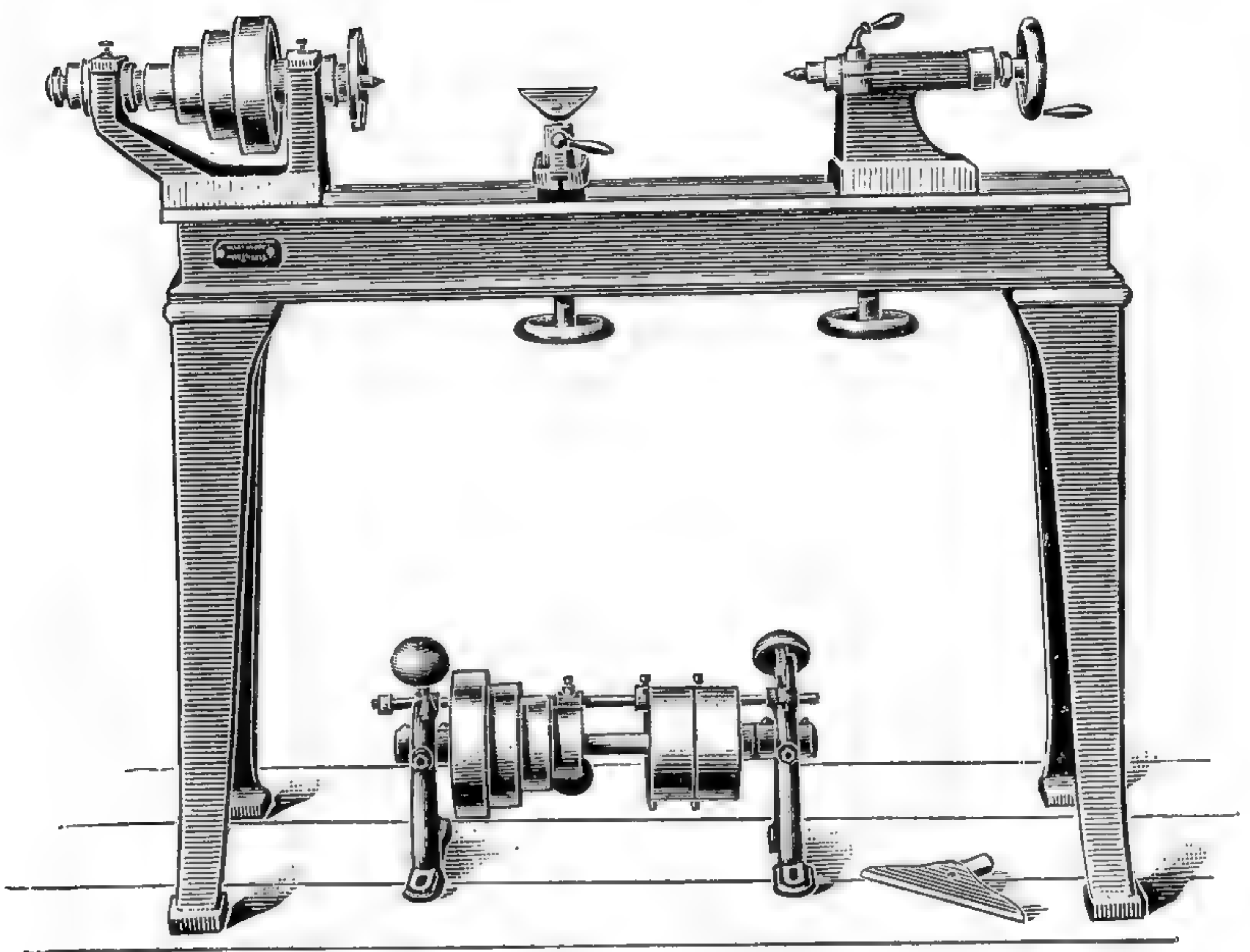
These Mandrels are of hardened steel, ground after hardening, and will run perfectly true, taking any size rings from No. 1 to No. 13. Being of slight taper, the ring will hold securely.



OLIVER



QUALITY



11" x 4' SPEED LATHE, WITH COUNTERSHAFT



11 in. x 4 ft. Speed Lathes

Head Stock — The spindle in the head is made from high carbon crucible steel, and has a 9-16" hole through it. The cone pulley is turned inside as well as out, insuring a perfectly balanced and true running head. The bronze bearings are of the best quality, heavy and well fitted.

Tail Stock — This is of the English or undercut design. Has self-discharging centers and quick adjusting locking device.

Wood Turning — We can furnish extras for wood turning as follows: Cup and spur centers, screw face plate, longer T rests, additional face plates and shelf on back side. These are at a special price.

Countershaft has tight and loose pulleys, 6" diameter for 2" belt, and should make 500 revolutions per minute.

This Lathe has been redesigned, introducing many improvements. Description and price on application.

Price, with countershaft (Habit).

Swing — 11".

Length of Bed — 4'.

Distance between Centers — 30".

Net Weight — 365 lbs.

Gross " — Domestic Shipment, about 450 lbs.

" " — Foreign " 465 "

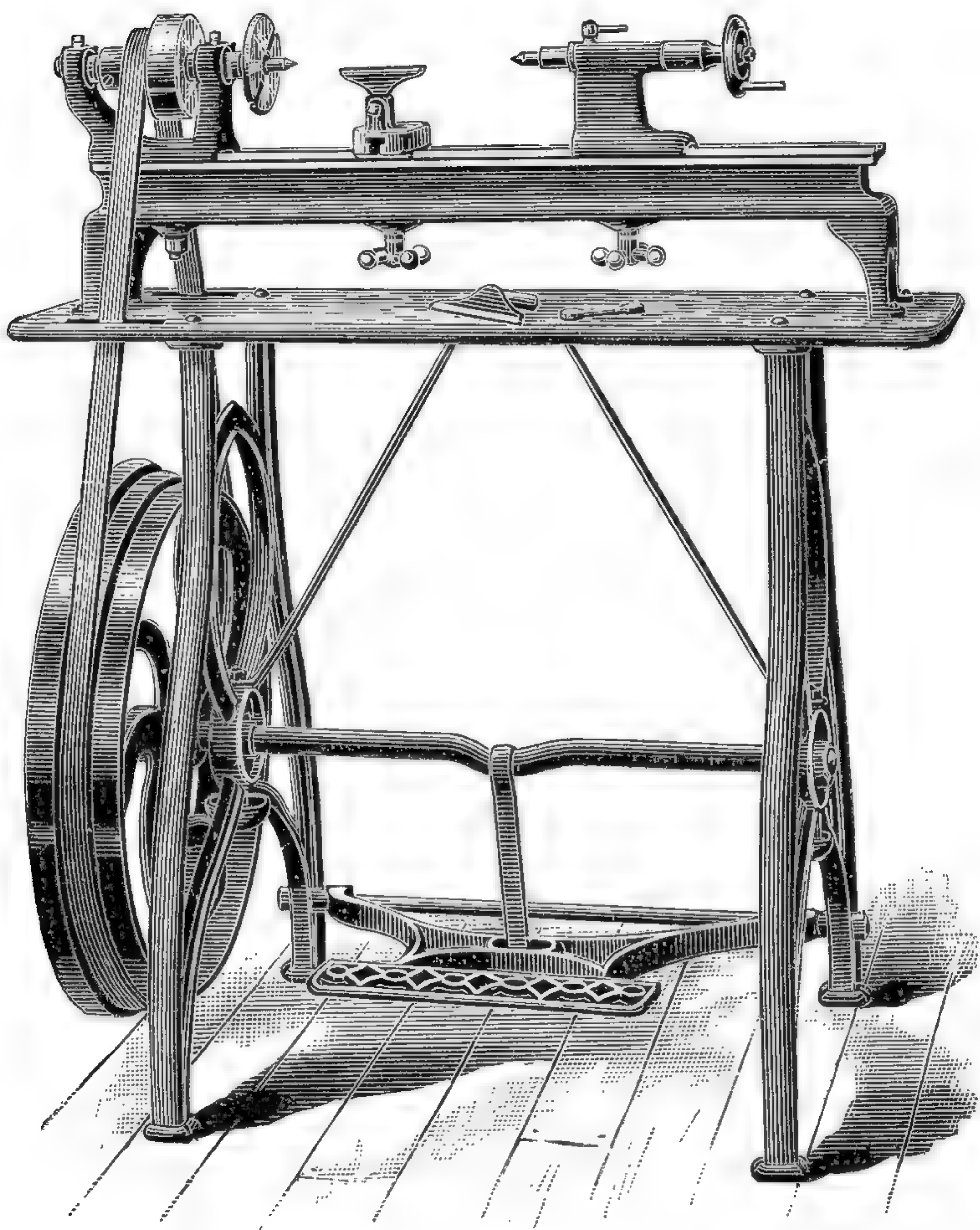
Dimensions — " " 2 Boxes,

57" x 16" x 11" — 34" x 23" x 14".

OLIVER



QUALITY



PLAIN FOOT LATHE



Plain Foot Lathe

The Head Stock has a three-speed cone for $1\frac{1}{4}$ " belt, and is turned inside as well as out. The spindle is of steel with a $\frac{1}{2}$ " hole through it, and runs in boxes that are adjustable for taking up the wear.

The Tail Stock has a steel spindle with self-discharging center, which lines perfectly with head stock center.

The Driving Wheel has ample weight, is well turned and balanced; the connecting shaft runs in our improved self-adjustable boxes, insuring perfect alignment.

The Table is of finely finished hardwood, and each lathe has one face plate, two pointed centers, short and long T rests, wrench and belt.

Price (Haffle), \$45.00.

Swing — 8". Length of bed — 3'.

Distance between centers — 20".

Net Weight — 225 lbs.

Gross " — Domestic Shipment, about 285 lbs

" " — Foreign " " 350 "

Dimensions — " " 2 Boxes,

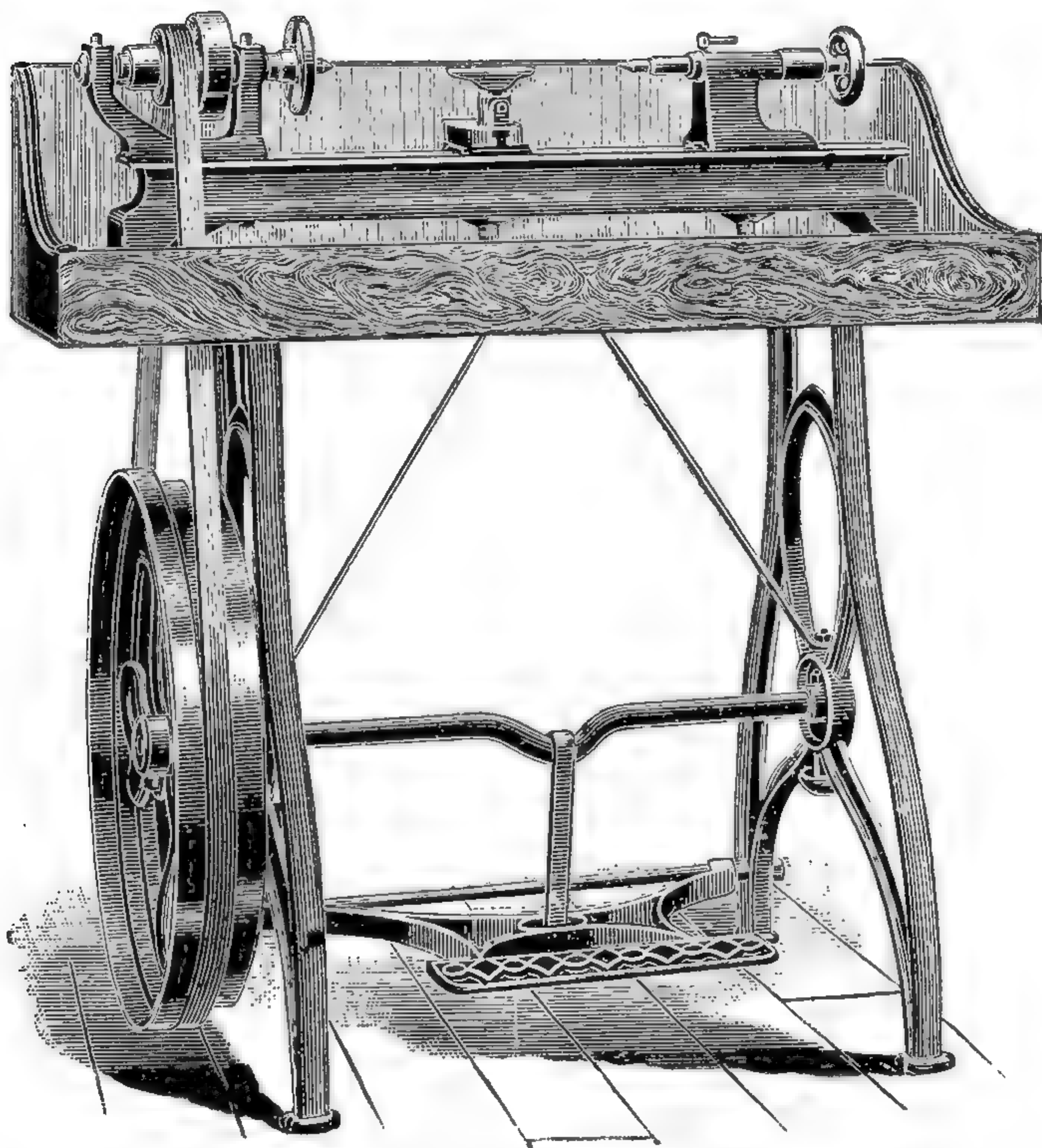
47" x 27" x 14"— 42" x 15" x 9".

For attachments, see page 65.

OLIVER



QUALITY



JEWELLERS' FOOT LATHE



Jewelers' Foot Lathe

For the use of the manufacturing jeweler, we have for a number of years furnished the above lathe, and it seems to have filled the requirements fully. In make-up it has the same general features as our Plain Foot Lathe.

The Head Stock is of the same size and capacity.

The Tail Stock has all the same points of convenience and perfection.

The Driving Wheel is heavy, well turned and balanced, and with connecting shaft and treadle that are all right.

The Box Top is made of nicely finished hardwood, lined with heavy zinc. It is 44" long by 17" wide, with a height at the back of 12", and at the front of 4".

Price (Haggish), \$50.00.

Swing — 8". Length of bed — 3'.

Distance between centers — 20".

Net Weight — 250 lbs.

Gross " — Domestic Shipment, about 310 lbs.

" " — Foreign " " 350 "

Dimensions — " " 2 Boxes,

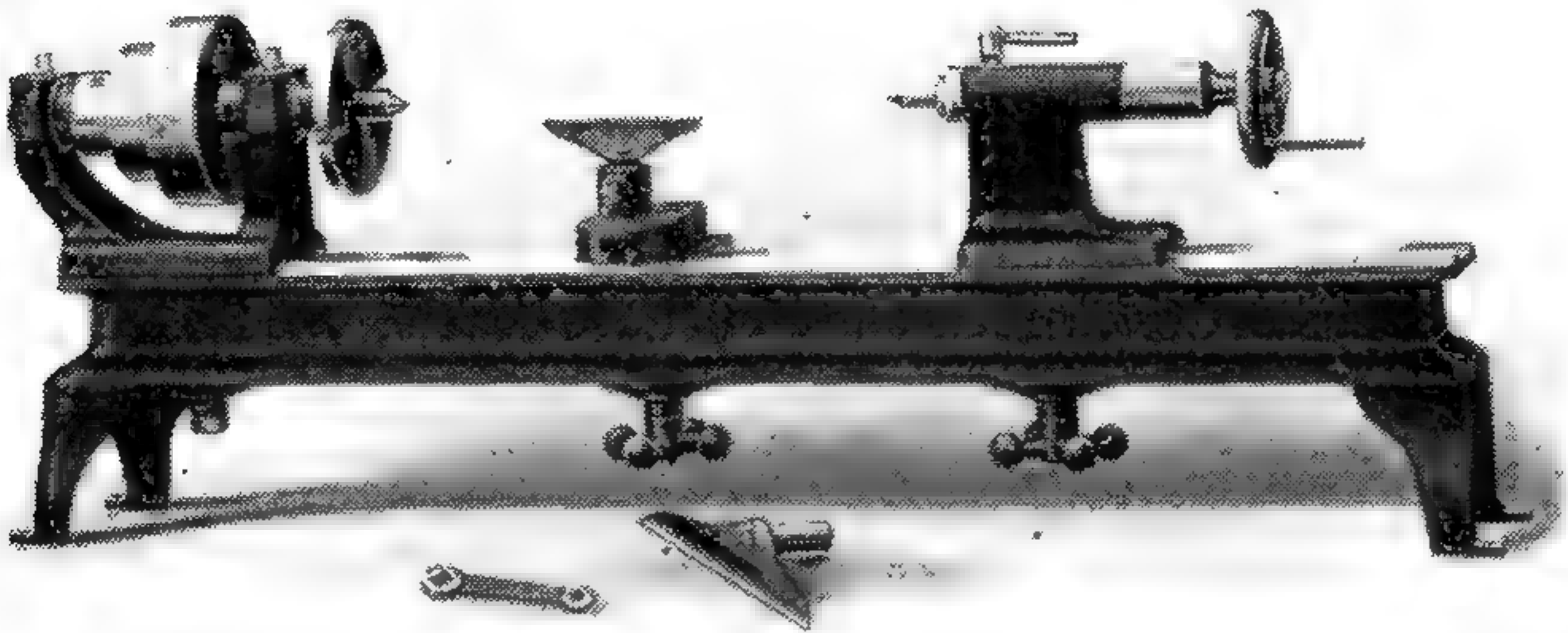
59" x 27" x 11" — 49" x 20" x 17".

For attachments, see page 65.

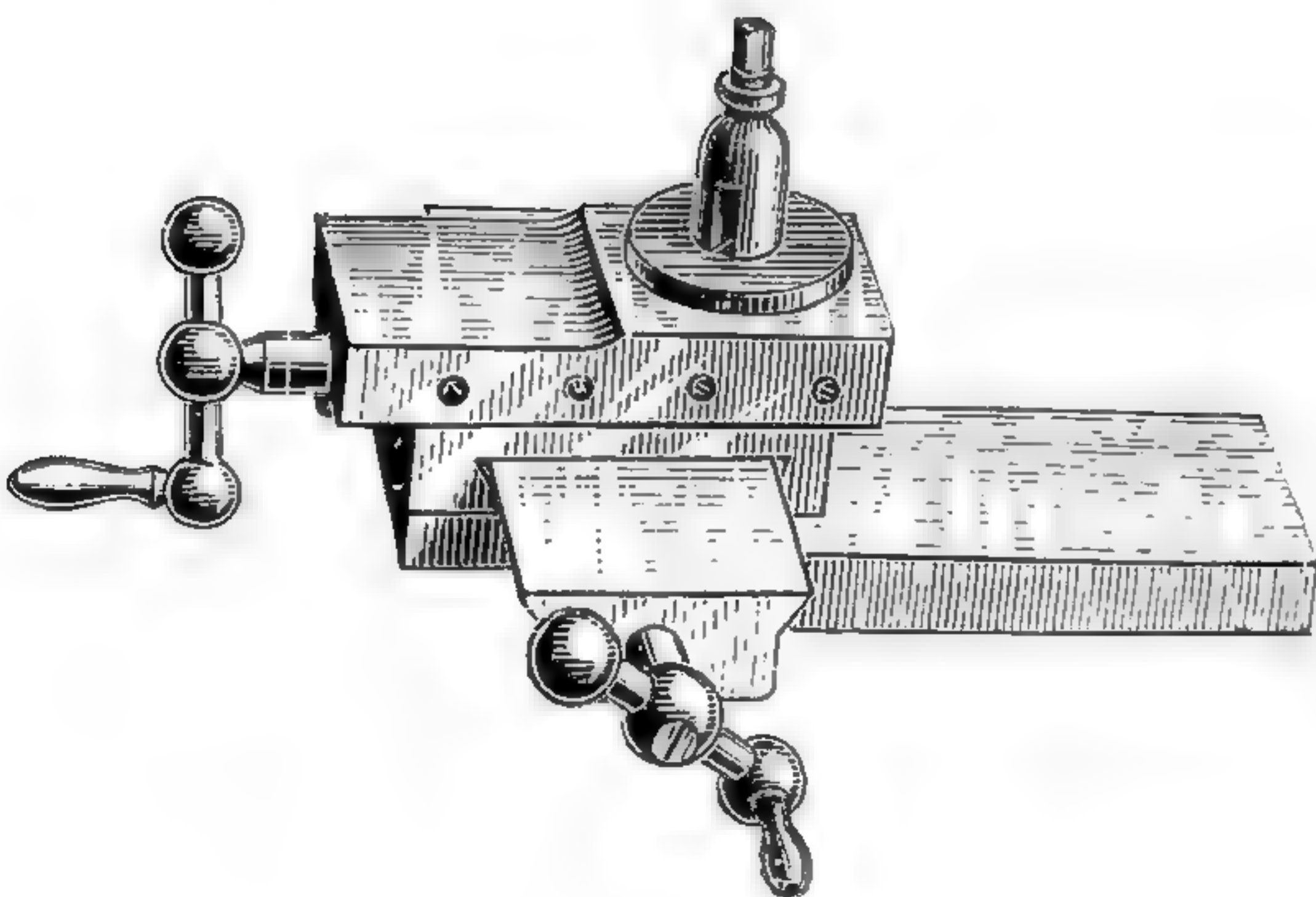
OLIVER



QUALITY



8" x 3' BENCH SPEED LATHE



8" SLIDE REST



Bench Speed Lathe

For the tool room or general machine shop use this lathe will be found very acceptable, being strong and accurate, with centers lining perfectly. The cone is turned inside as well as outside, and is for $1\frac{1}{4}$ " belt. There is a $\frac{1}{2}$ " hole through spindle, and this as well as the tail spindle is of steel; the latter has a self-discharging center.

The price given below is for the lathe without countershaft; the Nos. 2 and 3 countershafts, illustrated on page 66, are adapted to this lathe. Their tight and loose pulleys should run 300 revolutions per minute.

Price (Habile), \$25.00.

Swing — 8". Length of bed — 3'.

Distance between centers — 20".

Net Weight — 73 lbs.

Weight Boxed — 115 lbs.

Dimensions Box — 44" x 15" x 9".

Attachments for 8" x 3' Speed Lathes

Price — Cup Center, \$1.00.

" — Spur Center, \$1.00.

" — Screw Chuck, \$2.00.

Slide Rest

An exceedingly well-made tool, adapted to 8" swing hand or foot lathes. The longitudinal motion is 5", and the transverse motion $2\frac{3}{4}$ ".

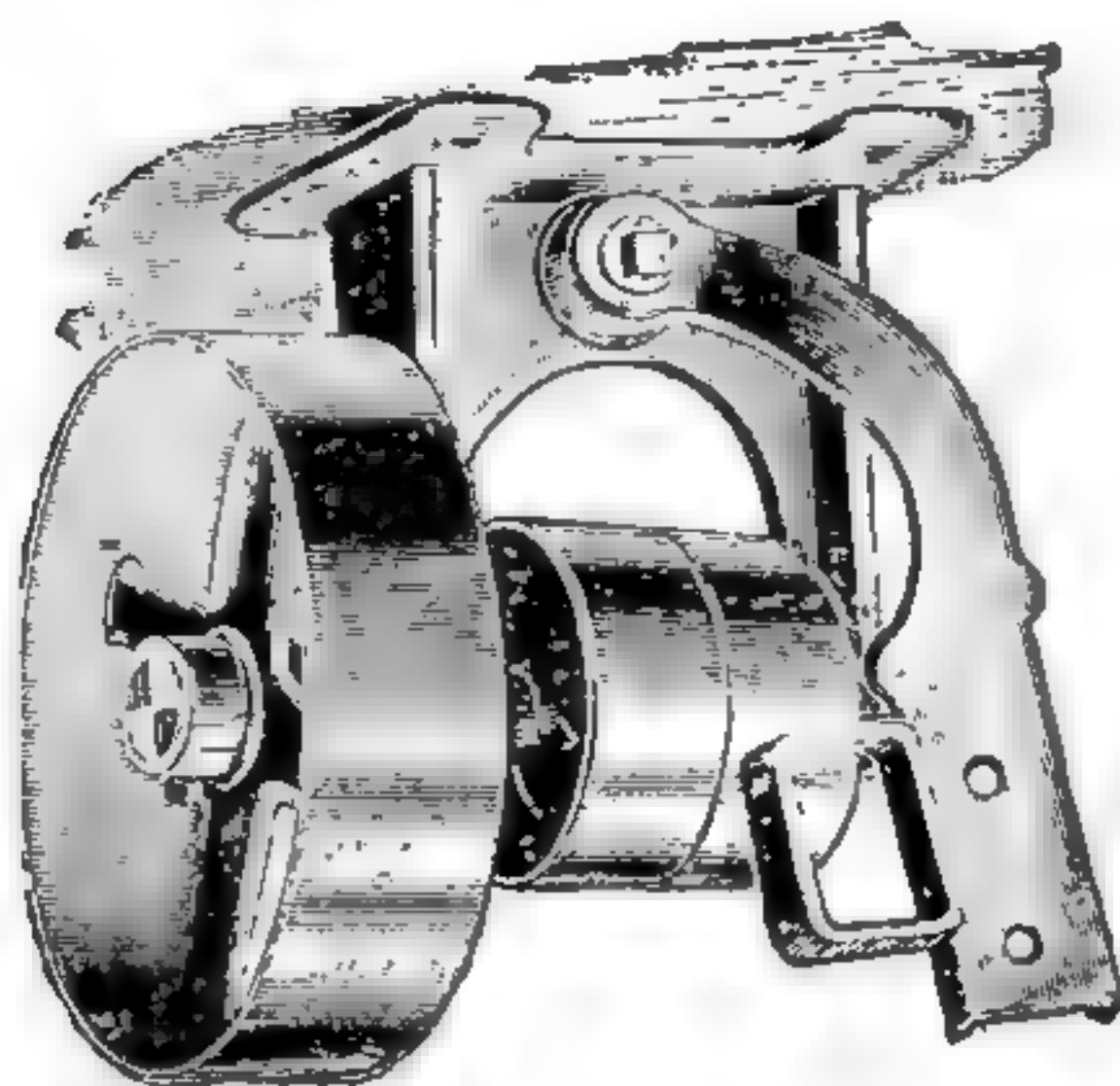
Price (Hadder), \$15.00.

" set of eight tools (Hack) — \$2.00.

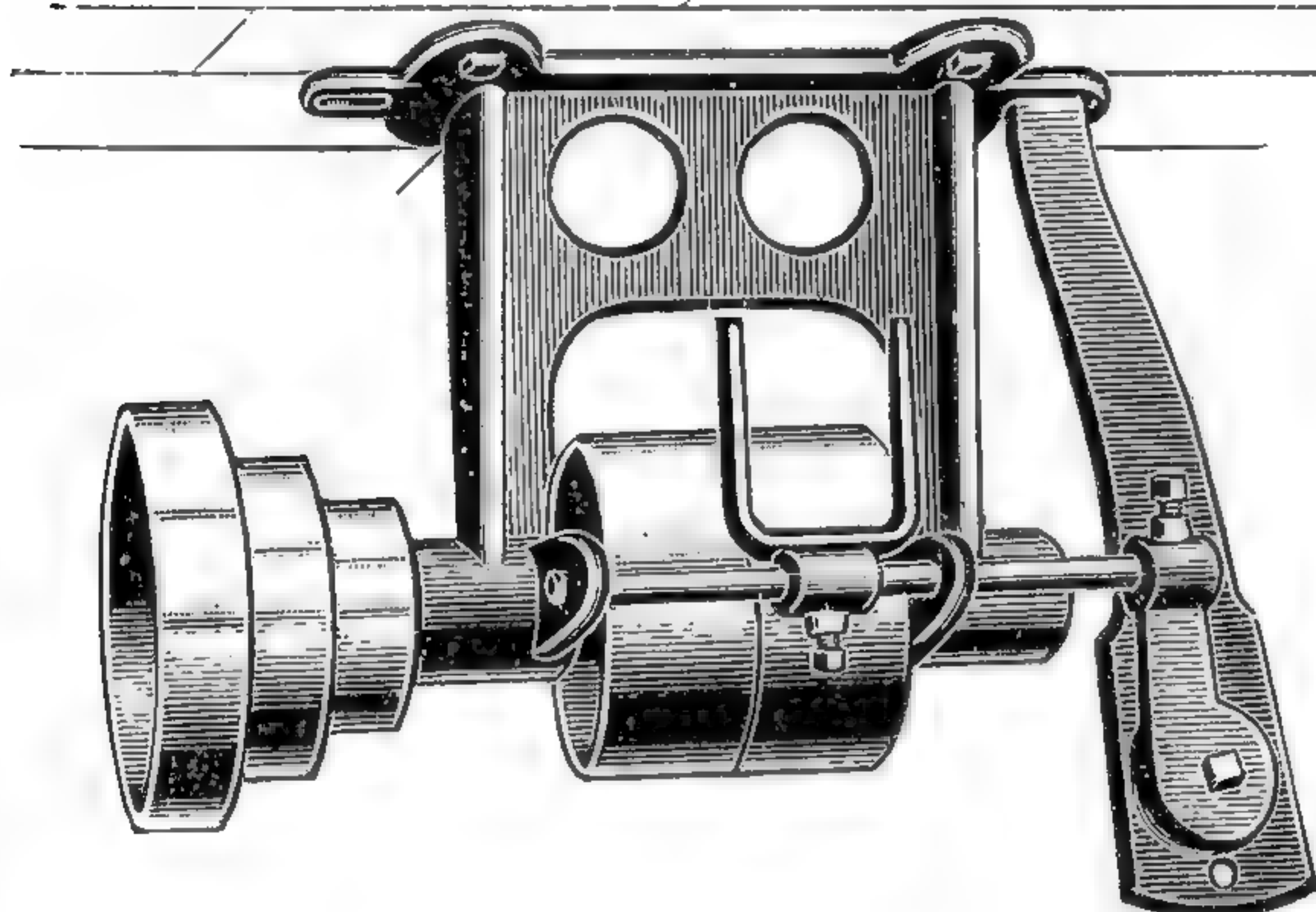
Weight Boxed — 13 lbs.



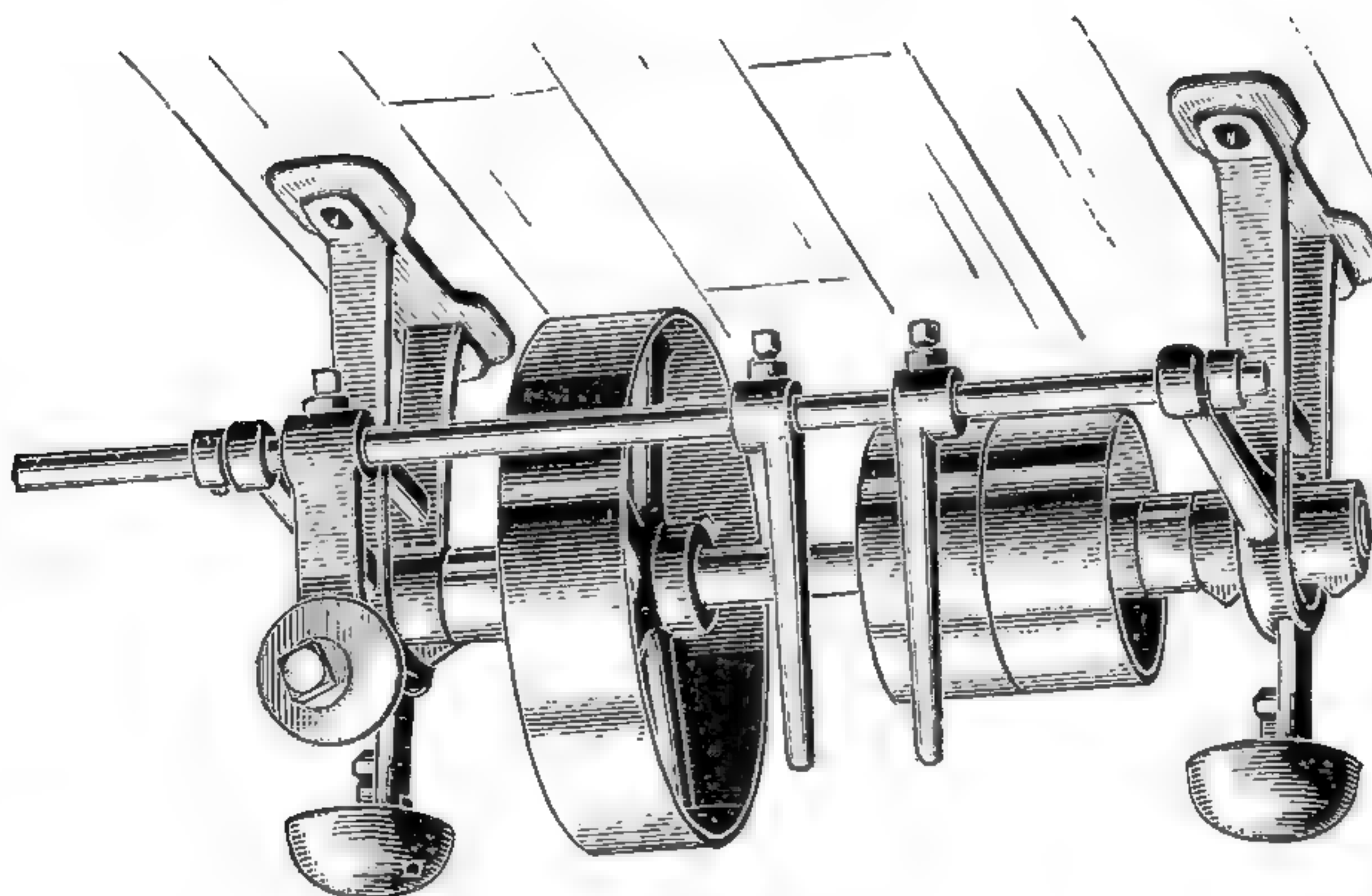
Countershafts



No. 1



No. 2



No. 3



Countershafts

No. 1 is a light, well-designed countershaft, adapted for use in connection with our smaller polishing heads.

Nos. 2 and 3 countershafts are used in connection with our Bench Speed Lathes, and larger polishing heads. The boxes are babbitted.

No. 1 — (Harl). Price, \$4.00.

Drop — 6".

Tight and loose pulleys, 4" diam. for $1\frac{3}{8}$ " belt.

Driving pulley 8" " " $1\frac{7}{8}$ "

Net Weight — 17 lbs.

Gross " — Domestic Shipment, about 23 lbs.

" " — Foreign " " 26 "

Dimensions — " " 13" x 12" x 10".

No. 2 — With 10" x 2" flat pulley (Heresy), . . Price, \$7.00

No. 2 — " 12" x 2" " " (Heretic), . . " 7.00

No. 2 — " cone pulley (Hask), " 7.00

Drop — 8".

Tight and loose pulleys, 5" diam. for $1\frac{7}{8}$ " belt.

Net Weight — 35 lbs.

Gross " — Domestic Shipment, about 45 lbs.

" " — Foreign " " 49 "

Dimensions — " " 18" x 14" x 9".

No. 3 — With 10" x 2" flat pulley (Hastive), . Price, \$8.00

No. 3 — " 12" x 2" " " (Heron), . . " 8.00

No. 3 — " cone pulley (Hoiden), " 8.00

Drop — 7".

Tight and loose pulleys, 5" diam. for $1\frac{7}{8}$ " belt.

Net Weight — 42 lbs.

Gross " — Domestic Shipment, about 52 lbs.

" " — Foreign " " 60 "

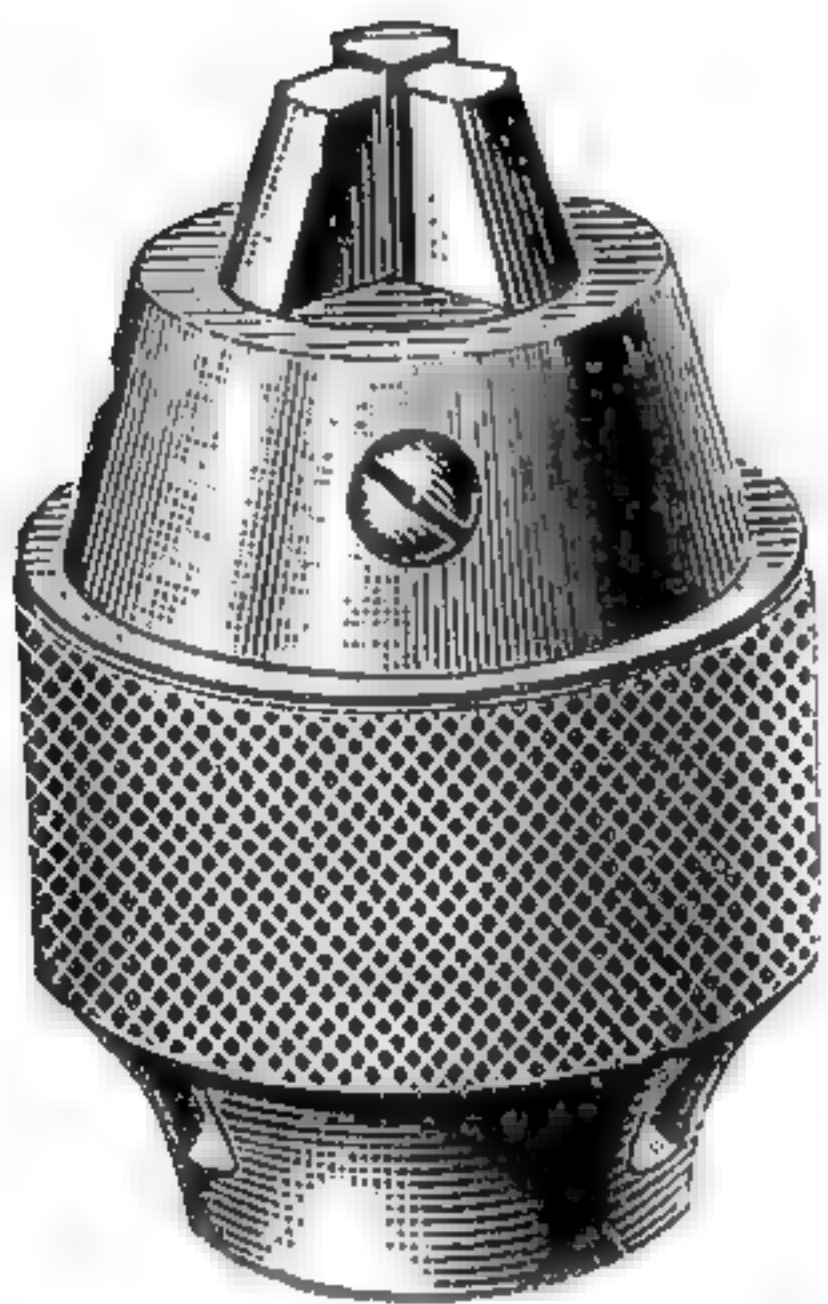
Dimensions — " " 23" x 14" x 10".

OLIVER

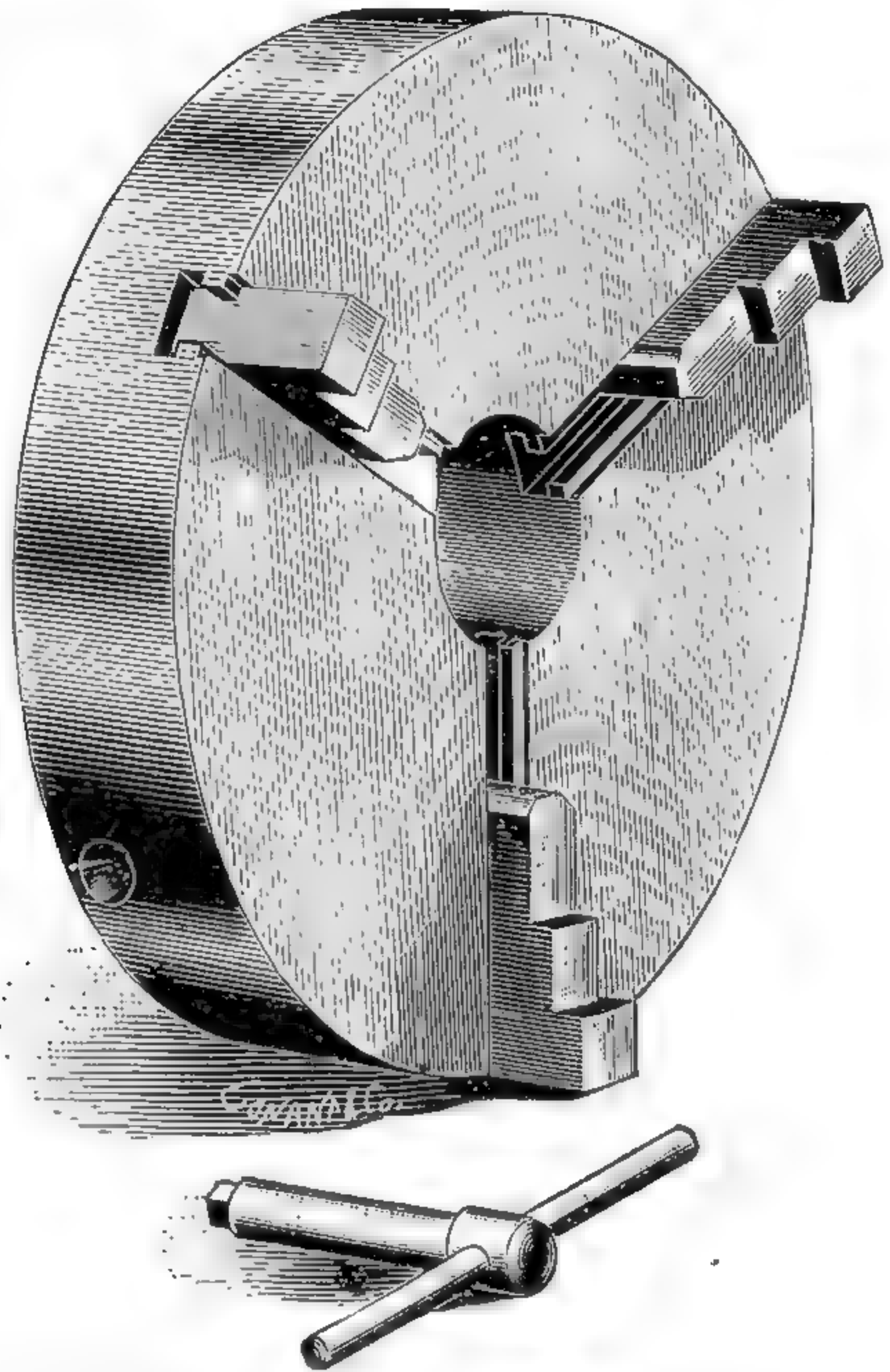


QUALITY

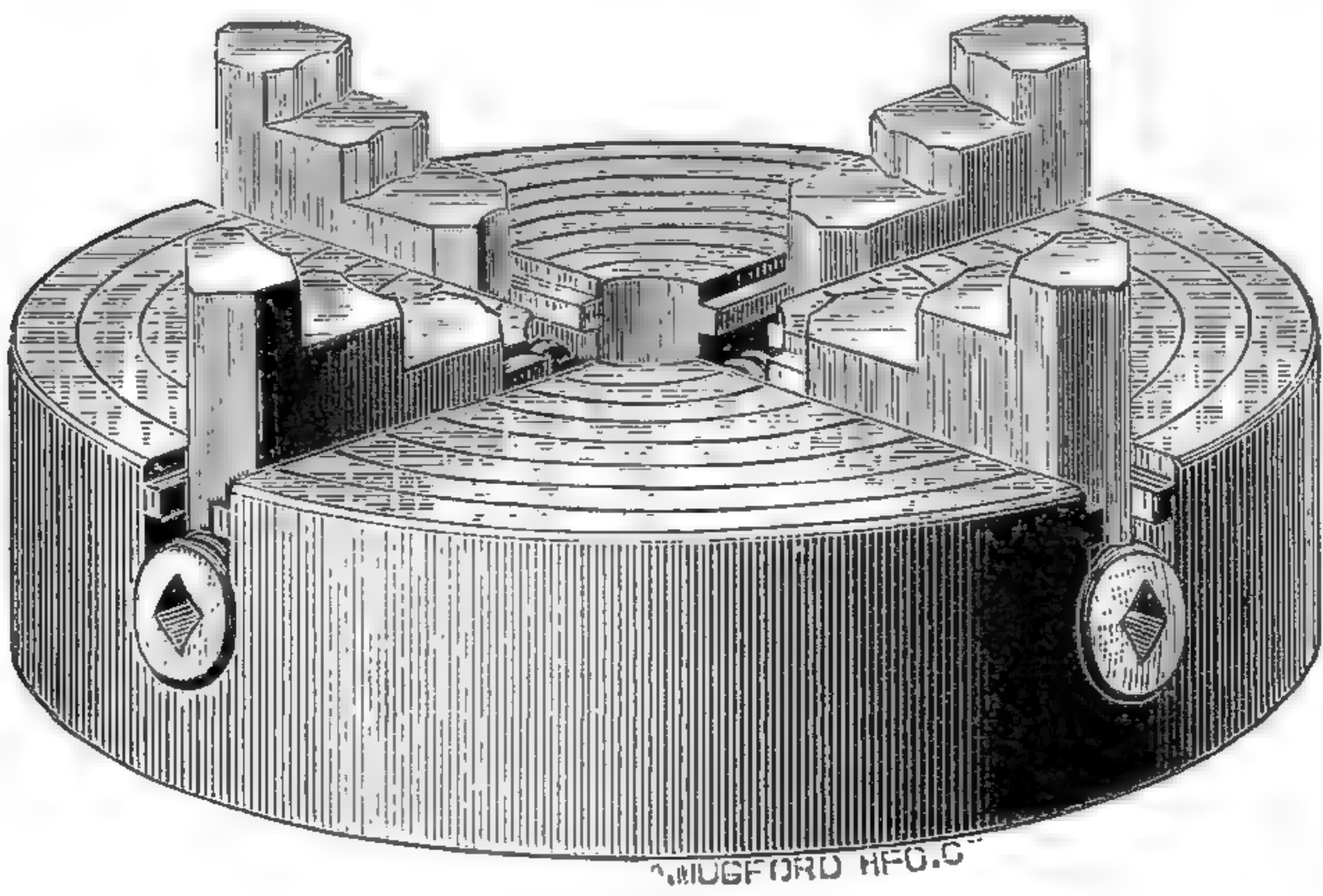
Lathe and Drill Chucks



"NEW MODEL"



"CHAMPION" GEARED SCROLL



"CHAMPION" INDEPENDENT

“New Model” Drill Chucks

The “New Model” Drill Chucks will meet the demand for a well-made and accurate tool. These chucks are made entirely of steel, and are especially adapted for rapid drilling with sensitive drills and hand lathes.

No. 11	— Capacity, 0 — $\frac{7}{32}$ (Hall),	Price, \$5.50
No. 12	— “ 0 — $\frac{11}{32}$ (Hakot),	“ 5.50
No. 13	— “ 0 — $\frac{17}{32}$ (Hallo),	“ 9.00

“Champion” Geared Scroll Chucks

These Chucks are built light but strong, and are well adapted for foot-power lathes. The illustration shows the No. 1 jaw; the No. 2 is the reverse or drill jaw.

Size	Price with One Set Jaws	Price with Two Set Jaws
3"	\$ 9.00 (Ham).	\$11.00 (Hussar).
4"	11.00 (Hame).	13.50 (Hydra).

“Champion” Independent Jaw Chucks

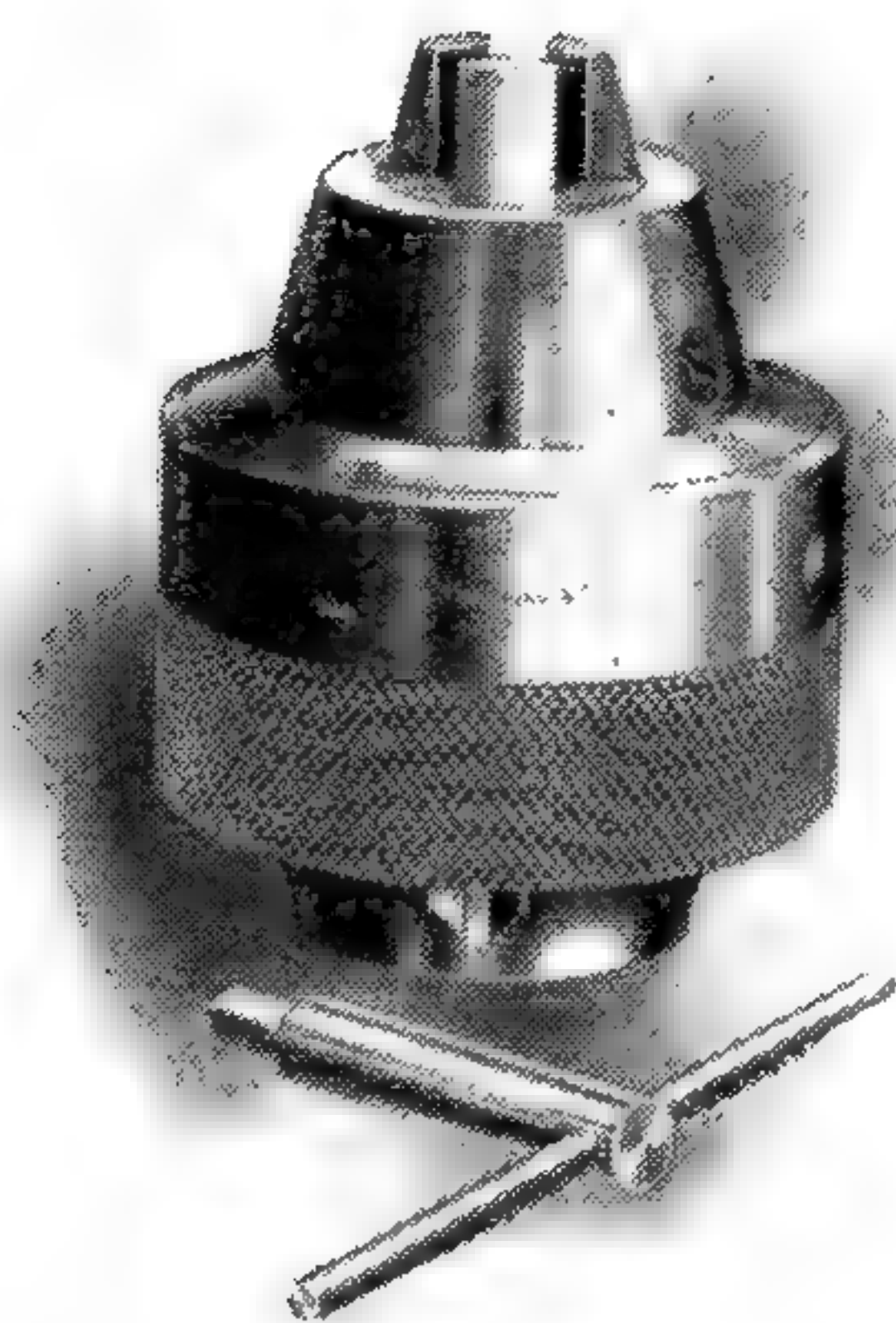
WITH REVERSIBLE JAWS

These Chucks are particularly designed for use on light lathes, and will hold every variety of round, square, irregular, or eccentric work. They have four solid steel jaws operated by separate screws.

Size		Price
2"	(Hump),	\$ 8.00
2½"	(Hunter),	9.00
3"	(Hurra),	10.00
4"	(Hyphen),	12.00



“Geared Pattern” New Model Drill Chuck



The “Geared Pattern” New Model Drill Chuck is especially adapted for holding twist drills where accuracy is required, and is capable of holding high speed twist drills driven to their limit.

The Chuck is operated by revolving the knurled nut by hand, causing the jaws to move outward and inward in the converging slots in the chuck body, as desired. A strong grip is obtained by use of key wrench which is furnished with each chuck. The rack and pinion gears are all beneath the surface.

“The Gears cannot be lost or mislaid.”

Every Chuck guaranteed as to accuracy.

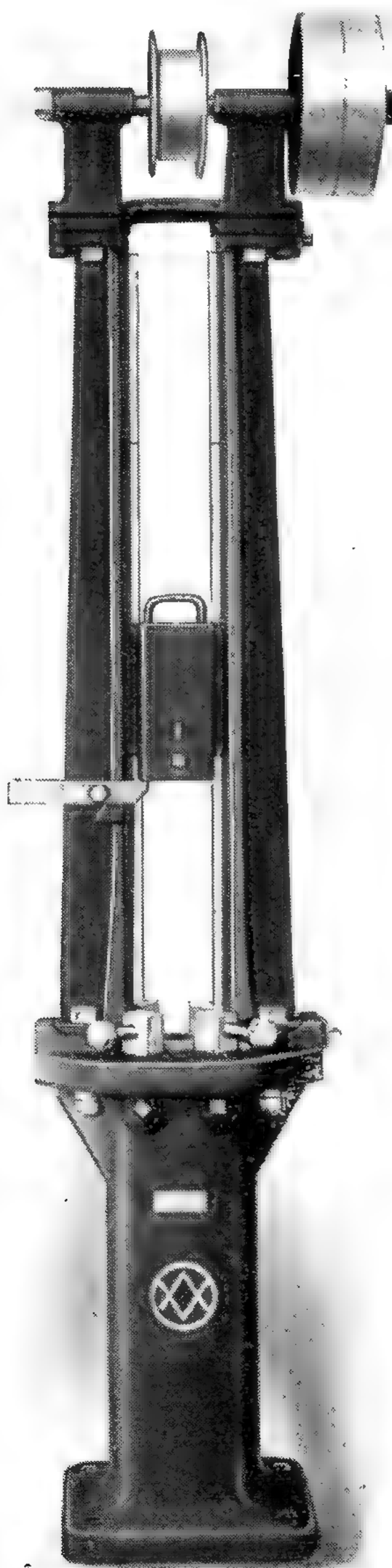
“No projections to injure work or workman.”

No. 21	— Capacity, 0 — $\frac{1}{4}$ "	(Halter),	Price, \$ 6.00
No. 22	— “ 0 — $\frac{3}{8}$ "	(Hamper),	“ 6.00
No. 23	— “ 0 — $\frac{17}{32}$ "	(Handle),	“ 10.00

OLIVER



QUALITY



NOS. 1 AND 2 DROP PRESSES FOR POWER



Power Drop Presses

The Oliver Quality line of drop presses are of a very massive design, proportioned to meet the severest requirements of drop-press practice.

The Bases are rectangular in section, and are ten times the weights of the hammers, the most efficient ratio.

The Hammers are unbreakable, the lifting hooks of wrought iron being cast solidly into the hammers themselves.

The Uprights are unusually stiff, only one being adjustable. The adjusting device is very simple, but is one that will hold the upright securely in its proper position.

The Poppets are of solid steel. The poppet screws are of hardened tool steel, having threads of very fine pitch to aid in making accurate adjustments and to lessen their tendency to loosen.

Springboard Foundation

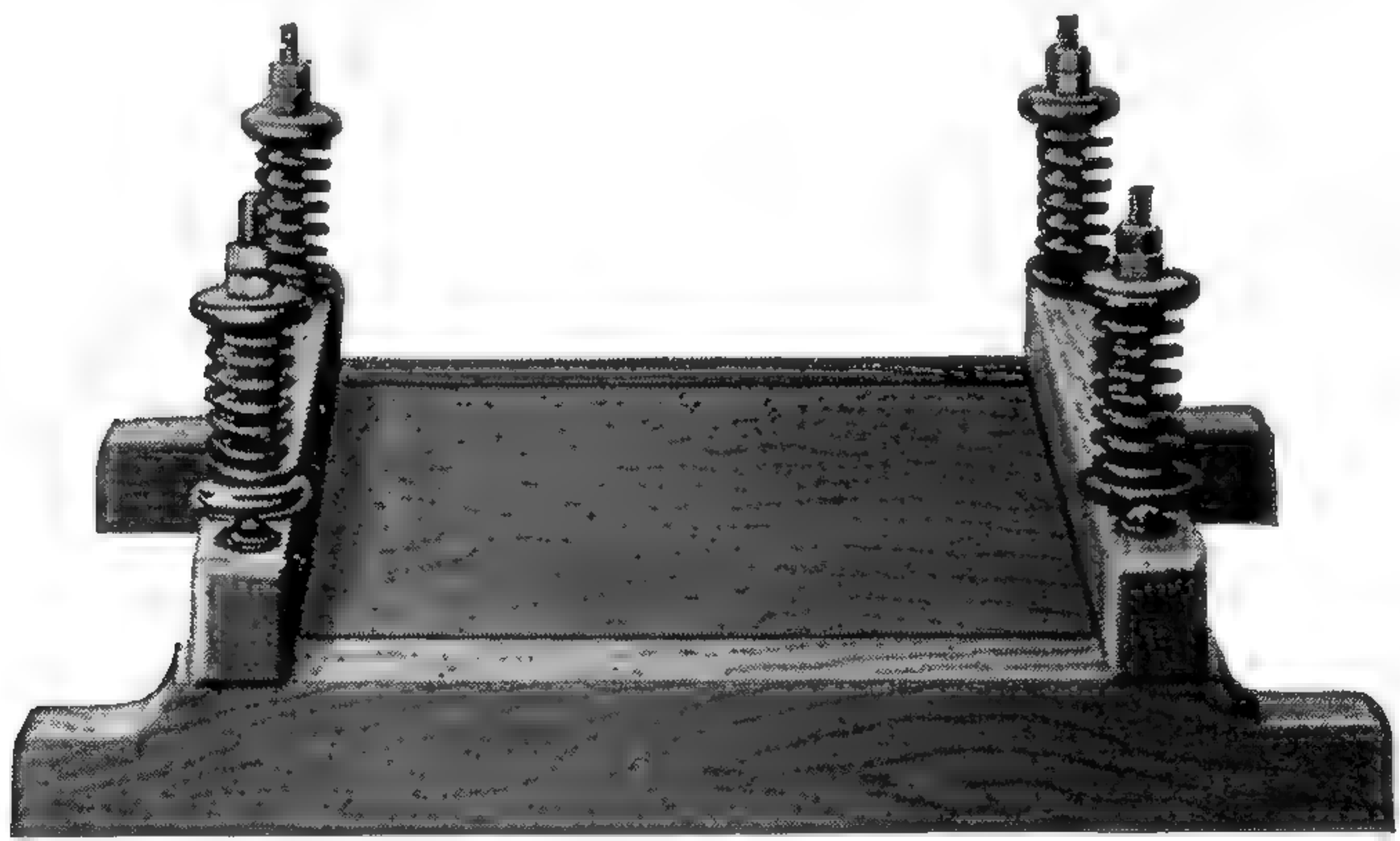
The Springboard Foundation is a very efficient device for damping the vibrations of drop presses. It will enable a drop press to be used in a building of the very weakest character, or in one where continued vibration would be annoying to other tenants.

It can be adjusted to accommodate drop presses of different weights, or to be adapted for use in buildings of different degrees of weakness.

Power Drop Presses

	No. 1	No. 2
Price,	\$110.00	\$130.00
Height over all,	88"	110"
" of base,	29"	30"
Length of uprights,	48"	66"
Distance between uprights,	5"	7"
" " poppets,	4 ¹¹ / ₁₆ "	7 ¹ / ₈ "
Stroke,	30"	48"
Size of tight and loose pulleys, . . .	10" x 2"	14" x 3"
Revolutions per minute,	100	100
Weight of hammer,	50 lbs.	100 lbs.
" of base,	500 lbs.	1,000 lbs.
Total Weight,	740 lbs.	1,480 lbs.
Gross Weight, Domestic Shipment, . .	900 lbs.	1,700 lbs.
" " Foreign "	950 lbs.	1,775 lbs.
Dimensions, " "	3 boxes	

No. 1—52" x 12" x 5" — 36" x 21" x 18" — 20" x 14" x 14".
No. 2—70" x 14" x 6" — 37" x 25" x 22" — 22" x 16" x 16".



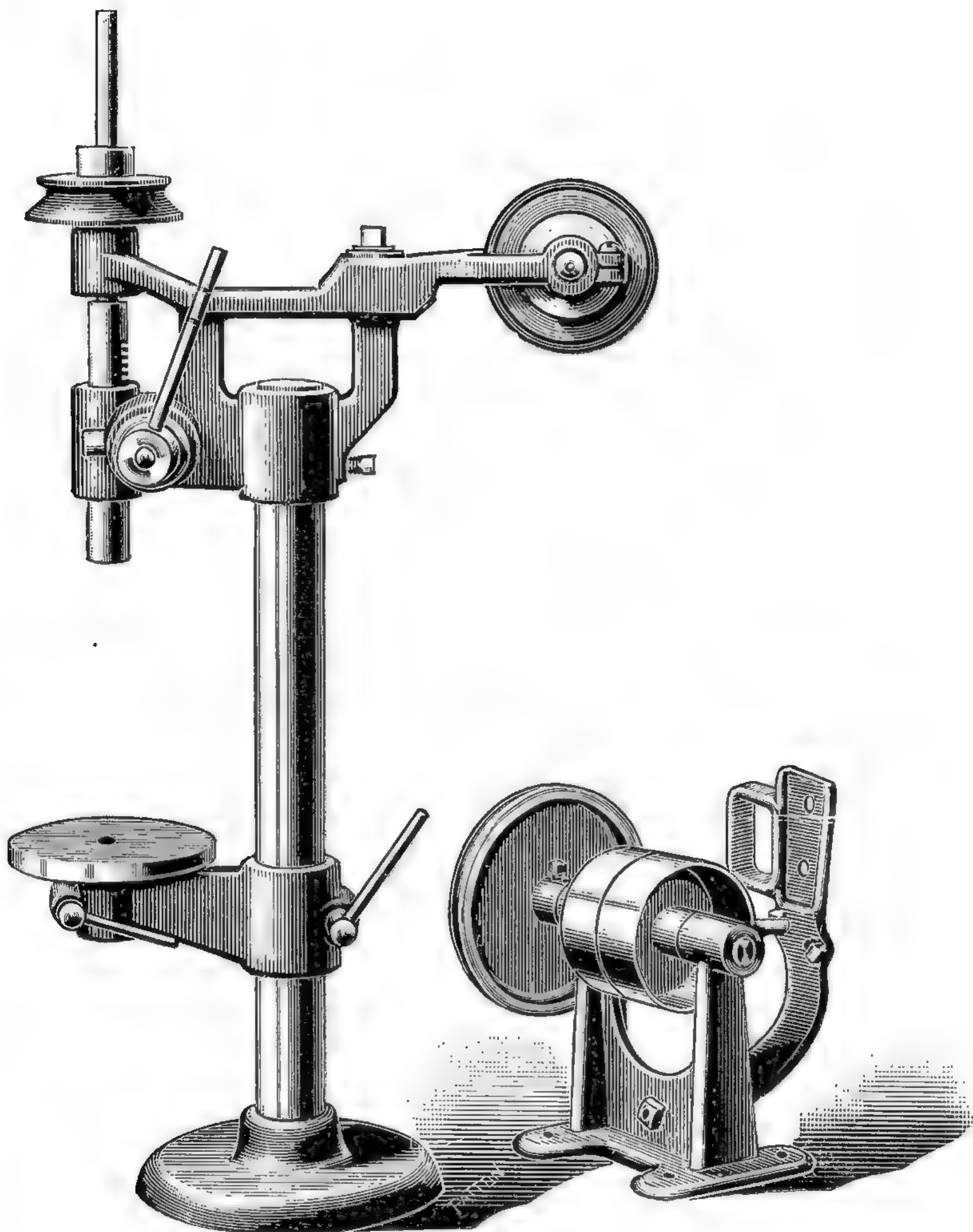
SPRINGBOARD FOUNDATION

Price (Genial), \$12.00.

OLIVER



QUALITY



No. 1 BENCH DRILL



No. 1 Bench Drill

This Drill is particularly well adapted for the sensitive, rapid, and accurate drilling of holes from the smallest size up to $\frac{3}{16}$ ".

The Spindle is made from open-hearth steel, and is carefully ground to size. It is counterbalanced by a coil spring around the feed-lever shaft.

The Bracket holding the cone pulley is adjustable for tightening the spindle-driving belt.

Price, with countershaft (Hanse), \$20.00.

“ No. 11 “New Model” Chuck, fitted (Hall), \$5.50.

“ No. 21 Geared Pattern New Model Chuck, fitted,
\$6.00.

Greatest distance between table and spindle — 8".

Movement of spindle by feed lever — $1\frac{3}{4}$ ".

Diameter of table — 4".

Swing — $5\frac{1}{2}$ ".

Tight and loose pulleys on countershaft — 4" in diam.
for $1\frac{1}{4}$ " belt.

Speed of same — 400 revolutions.

Net Weight — 40 lbs.

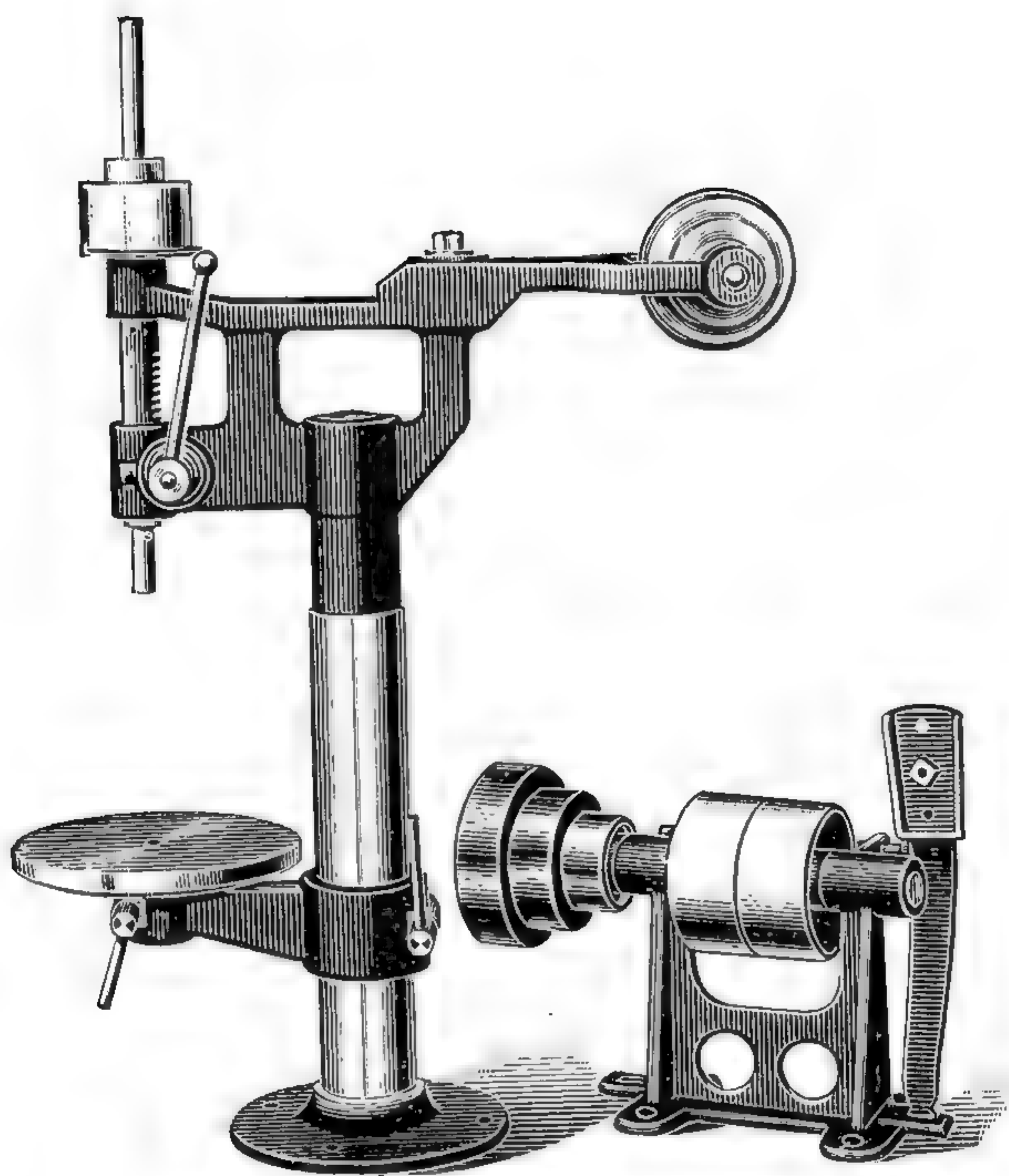
Weight Boxed — About 52 lbs.

Dimensions Box — 32" x 14" x 8".

OLIVER



QUALITY



No. 2 BENCH DRILL



No. 2 Bench Drill

This Drill is much heavier than our No. 1, though the same design is followed in its construction. It is for use in sensitive work with drills from the smallest size up to $\frac{3}{8}$ ".

The Spindle has Morse No. 1 taper hole, and is counterbalanced by a coil spring around the feed lever shaft.

The larger jewelry factories will find this drill better adapted to their work than the No. 1.

Price, with countershaft (Haik), \$32.00.

" No. 12 "New Model" Chuck, fitted (Hakot),
\$5.50.

" No. 22 Geared Pattern, "New Model" Chuck,
fitted, \$6.00.

Greatest distance between table and spindle — 12".

Movement of spindle by feed lever — 3".

Diameter of table — 9".

Swing — 10".

Tight and loose pulleys on countershaft — 5" in diam.
for 2" belt.

Speed of same — 400 revolutions.

Net Weight — 125 lbs.

Gross " — Domestic Shipment, about 150 lbs.

" " — Foreign " " 170 "

Dimensions — " " 2 Boxes,

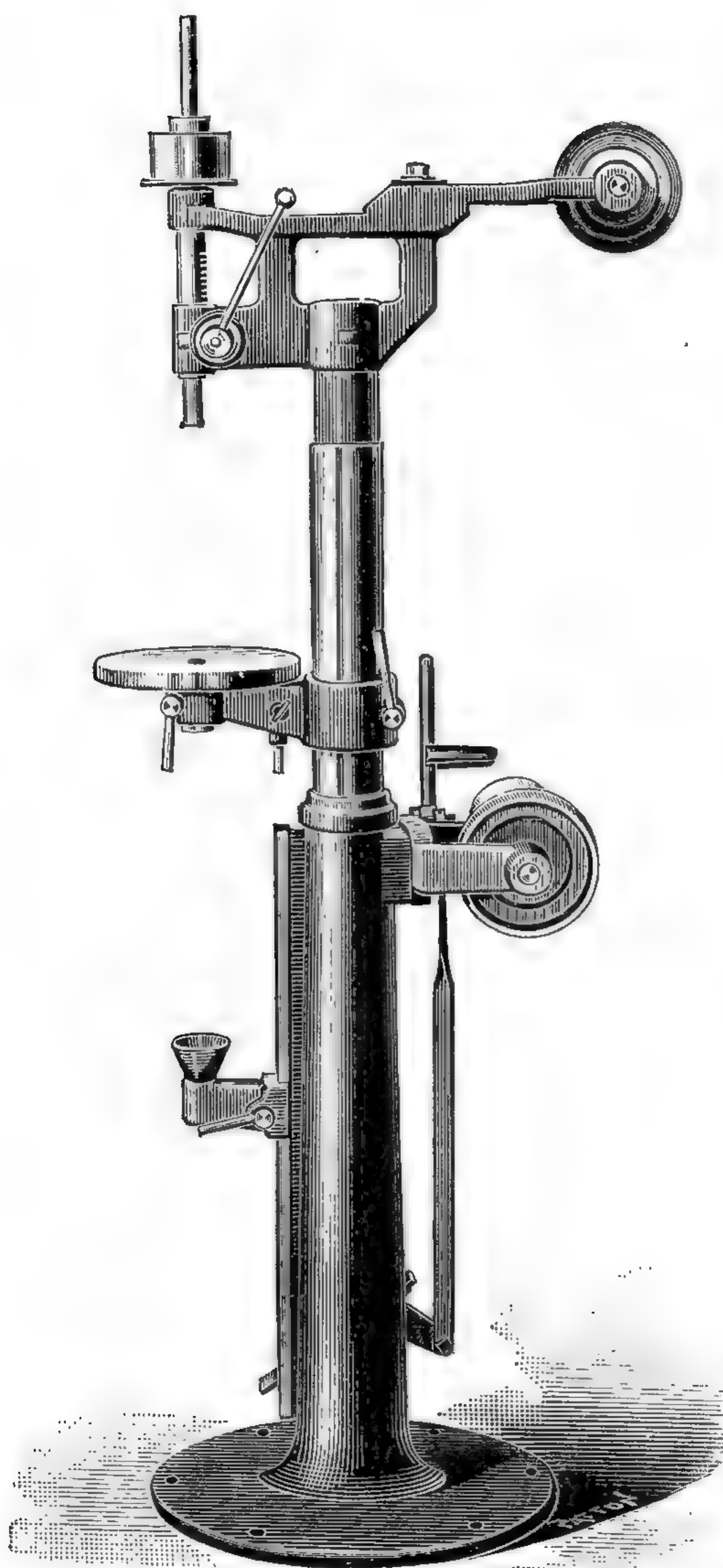
32" x 22" x 14"—18" x 14" x 9".

We are prepared to furnish this drill direct connected electric motor driven. To quote price, we would have to know the voltage of the electric current you would use, whether it would be direct or alternating, together with the number of cycles and phases if alternating.

OLIVER



QUALITY



No. 3 UPRIGHT DRILL



No. 3 Upright Drill

This is a sensitive drill for work up to $\frac{3}{8}$ " holes. The spindle has Morse No. 1 taper hole, and is counterbalanced by a coil spring around the feed lever shaft; the spindle is also graduated in front to give the required depth in drilling.

The Table Arm is adjustable to different positions on the column.

The Bell Center can be raised and lowered, and will fit in the center of the table. The cone has three changes of speed, and the belt can be shifted by hand or foot.

Price (Halm), \$45.00.

" No. 12 "New Model" Chuck, fitted (Hakot),
\$5.50.

" No. 22 Geared Pattern "New Model," Chuck,
fitted, \$6.00.

Greatest distance between table and spindle — 12".

" " " bell cup and spindle — 40".

Movement of spindle by lever feed — 3".

Diameter of table — 9".

Swing — 10".

Tight and loose pulleys — 4" in diam. for $1\frac{1}{2}$ " belt.

Speed of same — 400 revolutions.

Net Weight — 200 lbs.

Gross " — Domestic Shipment, about 250 lbs.

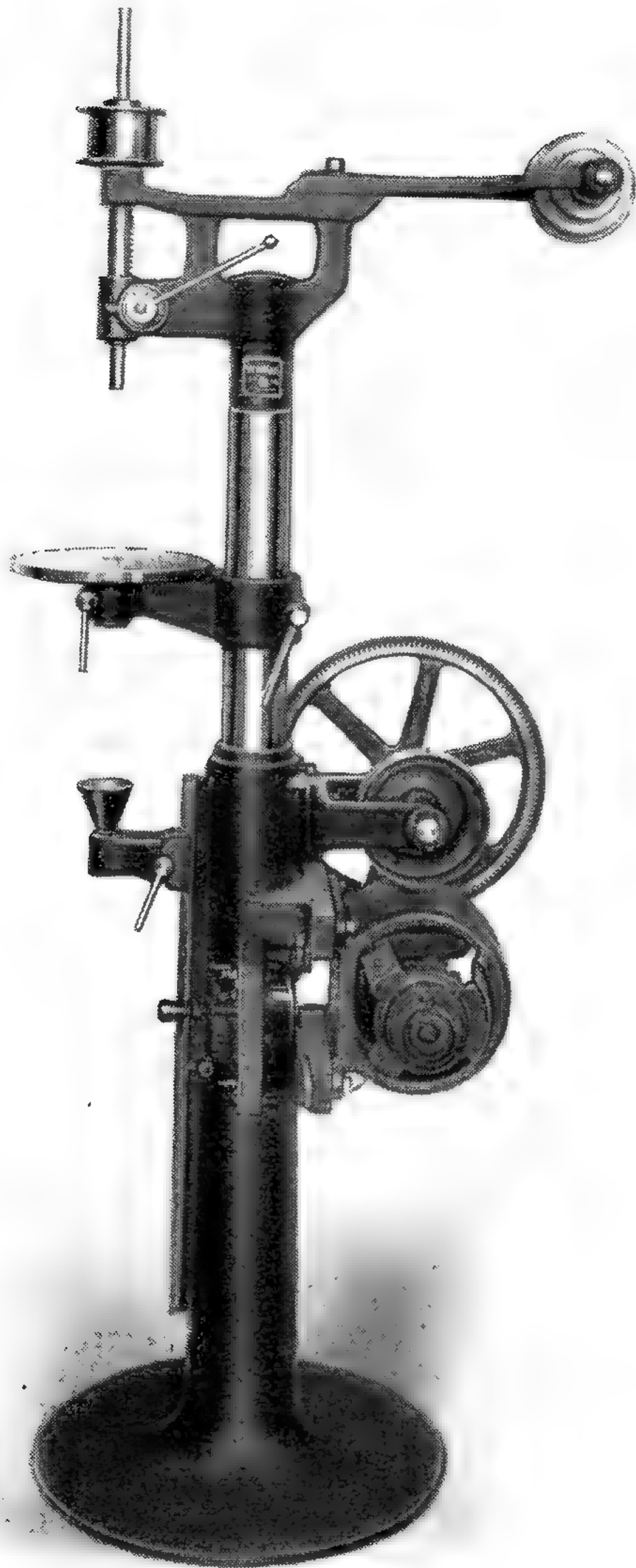
" " — Foreign " 295 "

Dimensions — " " 63" x 22" x 14".

OLIVER



QUALITY



No. 3 UPRIGHT DRILL
DIRECT-CONNECTED ELECTRIC MOTOR DRIVEN



No. 3 Upright Drill

Direct-Connected Electric Motor Driven

We are prepared to furnish any of our drill presses with direct motor connection. This method of driving machinery is far superior to the old method of drive belts and countershafts from a line shaft. There is no power consumed when the machine is not in operation, and no overhead shafting is required.

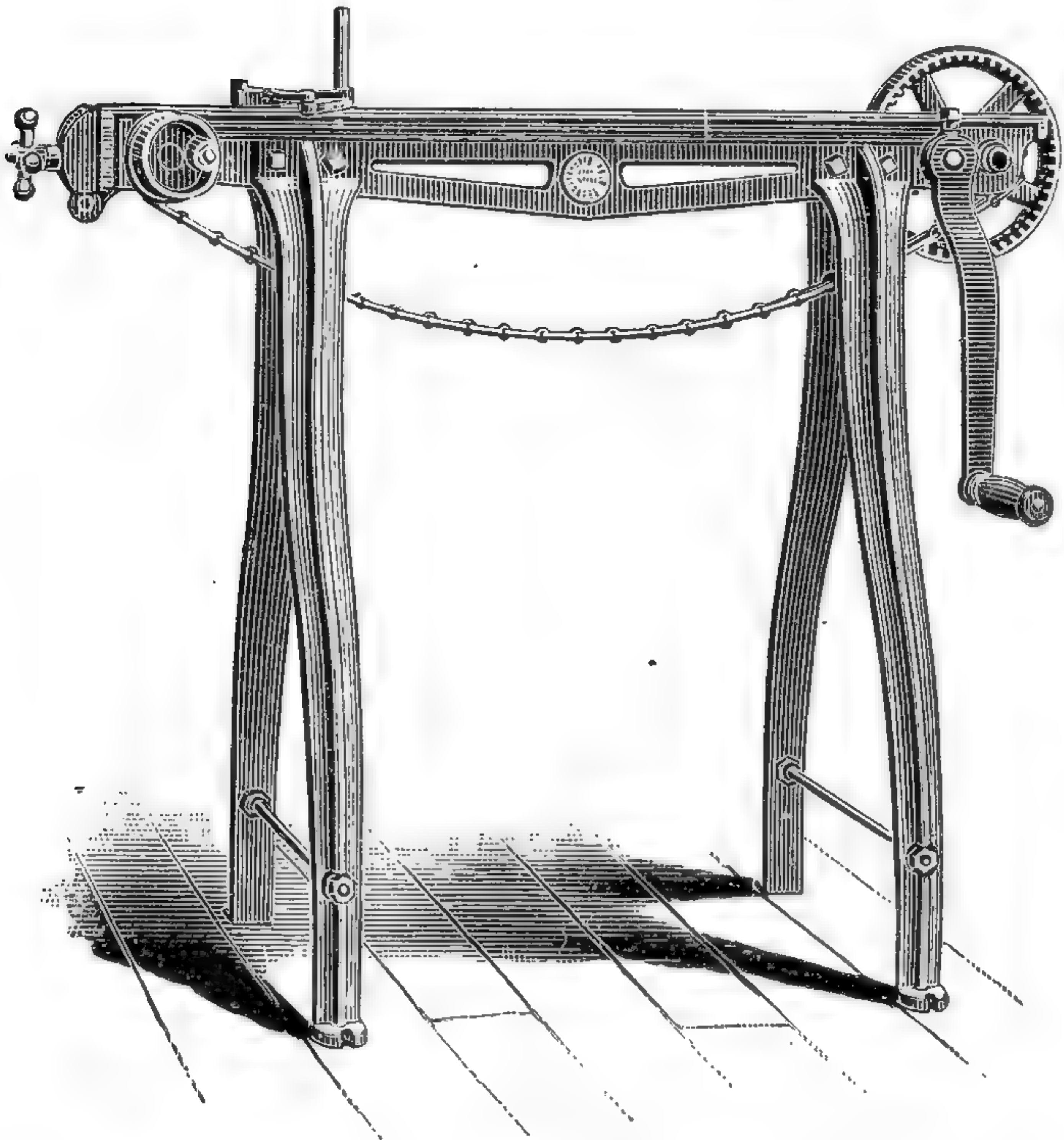
The motor used on our No. 3 Upright Drill is a $\frac{1}{2}$ H. P. Motor, and is amply powerful enough to drive the drill press to its utmost capacity. It is mounted on a suitable bracket on the column of the drill, and is connected by means of a rawhide pinion and gear to a shaft on which is fastened a cone pulley. This cone pulley is in turn belted to the cone pulley on the upper shaft of the drill. All the gearing used is well protected by cast-iron gear guards.

Prices quoted on application.

Quotations furnished upon receipt of particulars as to the voltage, cycles, and phases of the electrical current you would use.



Hand Draw Bench



This machine is as great an improvement over the old wooden bench as the latter is over the hand drawing from plate in the vise. The tongs can be started at any point in the endless chain, and long lengths of wire can be drawn by using the coiler.

The jaws of the tongs furnished with our Hand Draw Bench are provided with removable tool steel faces which can be replaced at a small cost.

Price, 4 feet long (Gabbro), \$20.00.

Net Weight — 100 lbs.

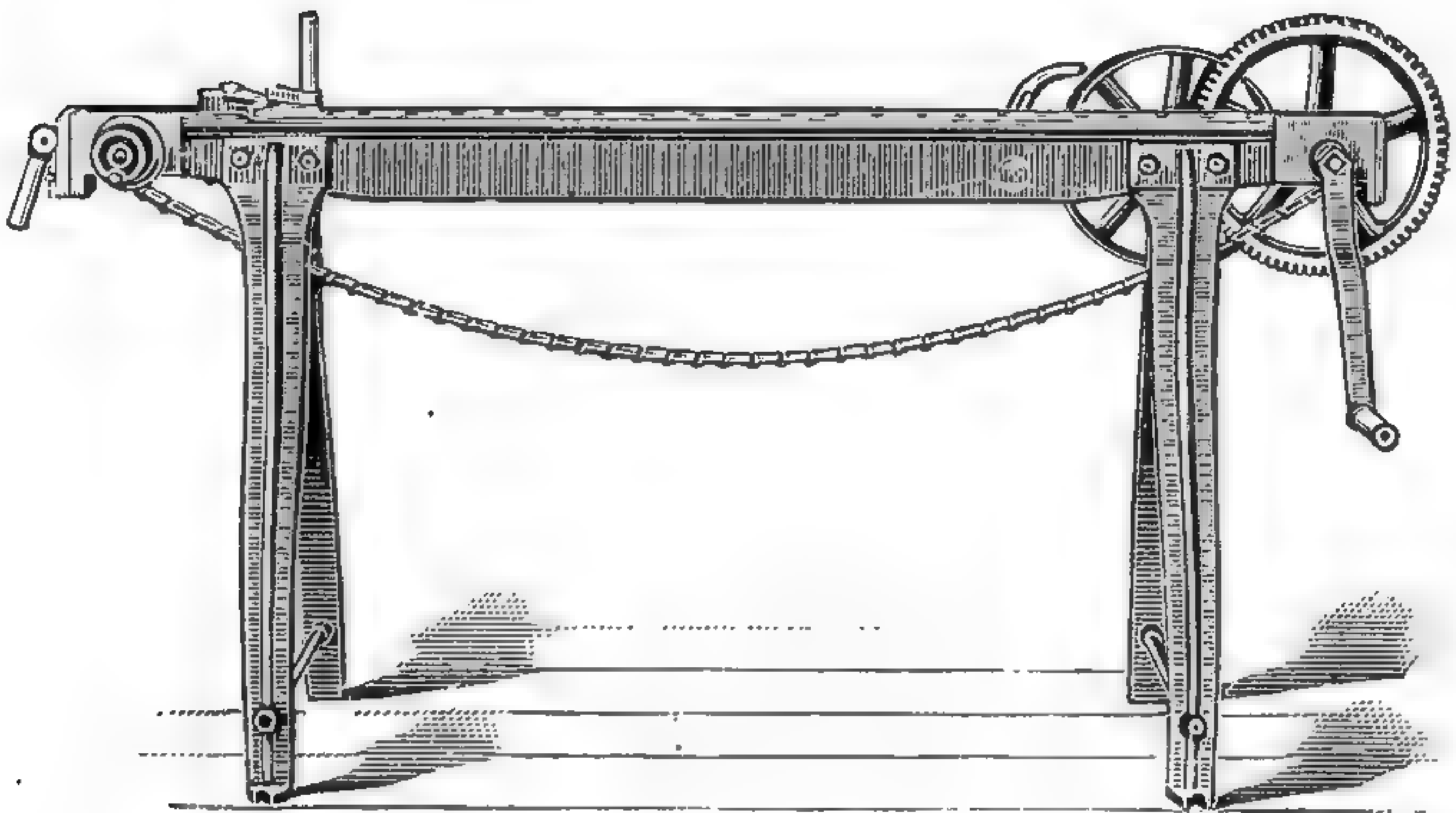
Gross “ — Domestic Shipment, 130 lbs.

“ “ — Foreign “ 142 “

Dimensions — “ “ 49" x 13" x 11".



Power Draw Bench



These draw benches have solid steel tongs, that can be placed at any point in the endless chain; coiler for wire, and a quickly-adjustable device for holding the plate; hand crank, for use when desired.

All cut gears are used, and the machines are heavy and powerful.

The tight and loose pulleys are 13" x 2½", and should run about 125 revolutions per minute.

6' long (Gabion). Price, \$65.00.

Net Weight — 275 lbs.

Gross " — 395 "

8' long (Gadoid). Price, \$75.00.

Net Weight — 350 lbs.

Gross " — 450 "

10' long (Galage). Price, \$85.00.

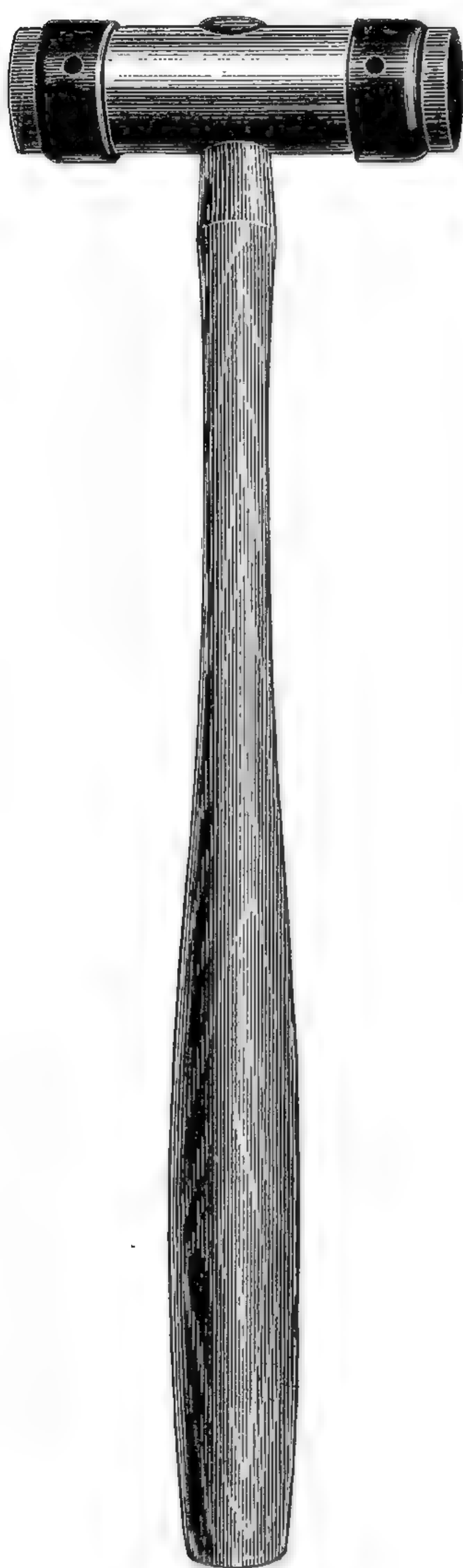
Net Weight — 400 lbs.

Gross " — 500 "

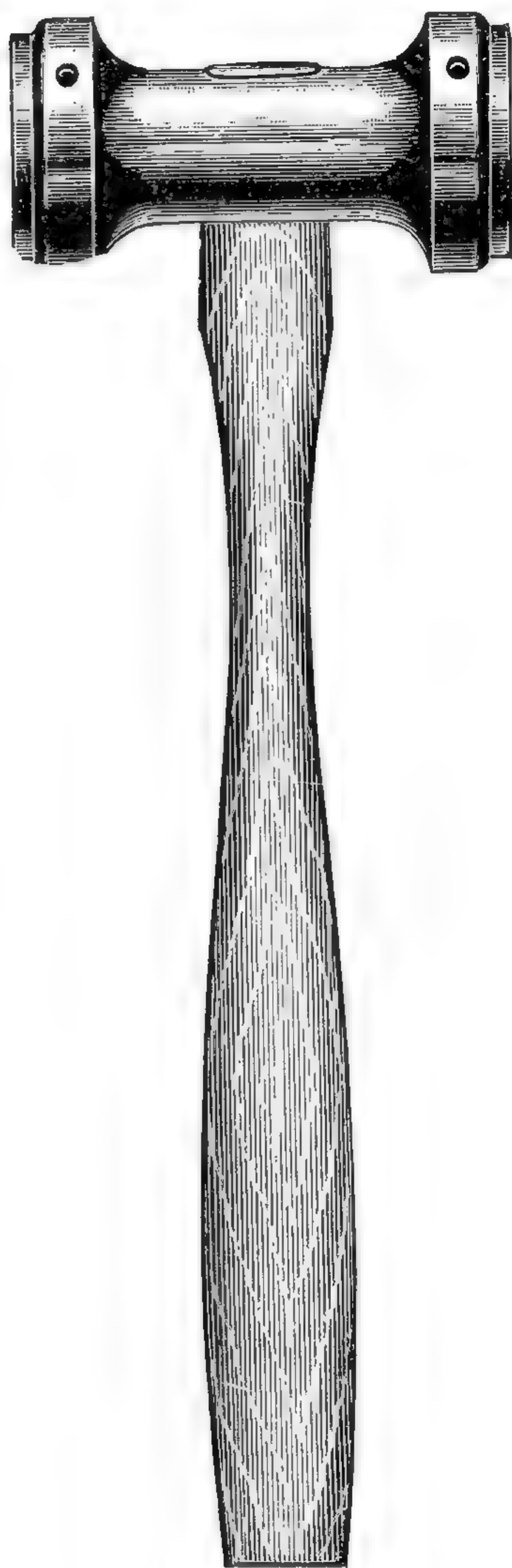
OLIVER



QUALITY



5 AND 10-OZ. FIBER-
FACED HAMMERS



16 AND 24-OZ. FIBER-
FACED HAMMERS

Improved Fiber-Faced Hammers

These Hammers are made of steel and malleable iron, are finely finished, and, taking the place of the mallet without being bulky, will be found very useful to any metal worker, as a hard elastic blow can be given without injury to the work.

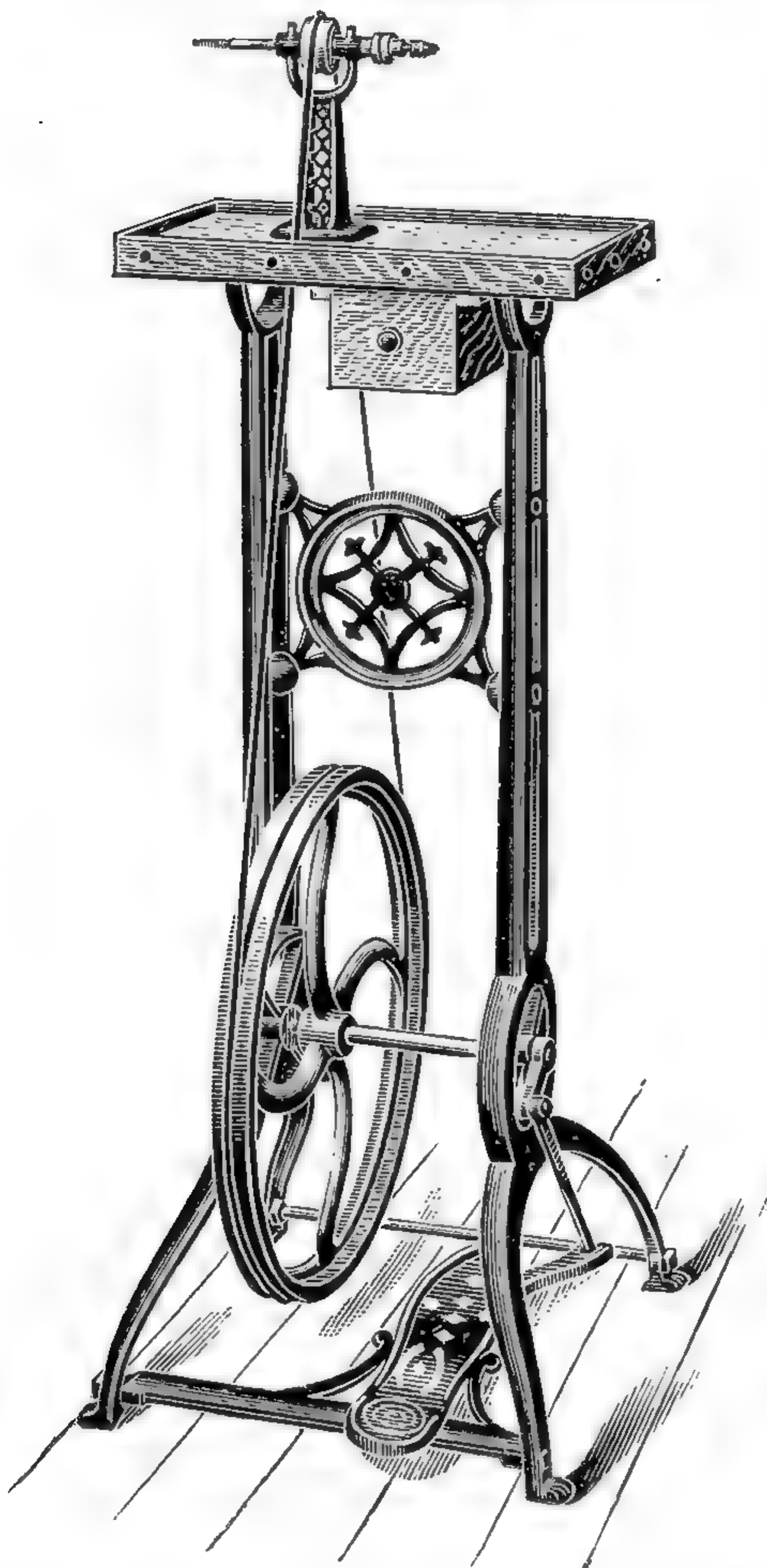
The Rings that screw on at each end have a inside flange that holds the fiber faces in their place. When these faces are worn out from use they can be quickly removed, by unscrewing the rings with the spanner wrench that is furnished with each hammer, and new ones inserted.

The manufacturing jeweler, watchmaker, dentist, machinist, optical and mathematical instrument maker, will find them an invaluable tool in their line.

Weights	Face		Single		Extra Faces	
	Diameter				Per Doz.	Pairs
5 oz.	$\frac{3}{4}$ "	(Hay),	\$0.60	(Hole),	\$6.00	\$0.50
10 "	1"	(Haze),	.60	(Holls),	6.00	.50
16 "	$1\frac{1}{4}$ "	(Hazel),	.85	(Holly),	9.00	.75
24 "	$1\frac{3}{4}$ "	(Hazy),	1.10	(Hollow),	12.00	1.00



No. 0 Polishing Lathe



The table top, 9" x 15", is of finely finished hardwood, with a raised edge, to keep articles from rolling off.

Price, without head, \$7.00.

" with No. 0 head (Galiot), \$8.25.

" " No. 0C head, as in cut (Galt), \$8.50.

Net Weight — 50 lbs.

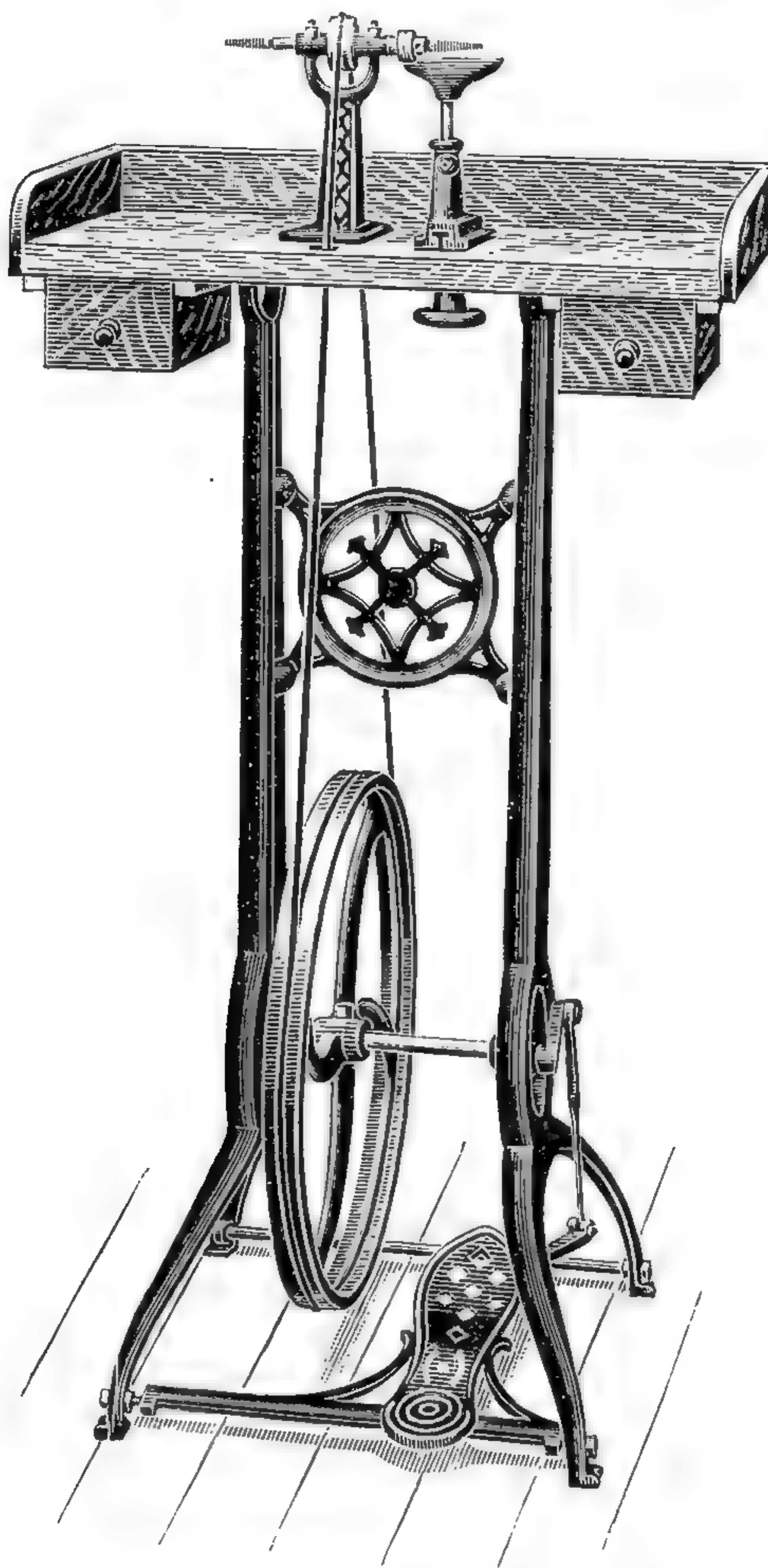
Gross " — Domestic Shipment, about 62 lbs.

" " — Foreign " " 70 "

Dimensions — " " 40" x 19" x 8".



No. 0A Polishing Lathe



The table top, 12" x 22", is made of finely finished hardwood.

Price, without head, \$8.50.

" with No. 0 head, as in cut (Gally), \$9.75.

" " No. 0C head (Galong), \$10.00.

Lathe without rest — \$0.50 less.

Net Weight — 55 lbs.

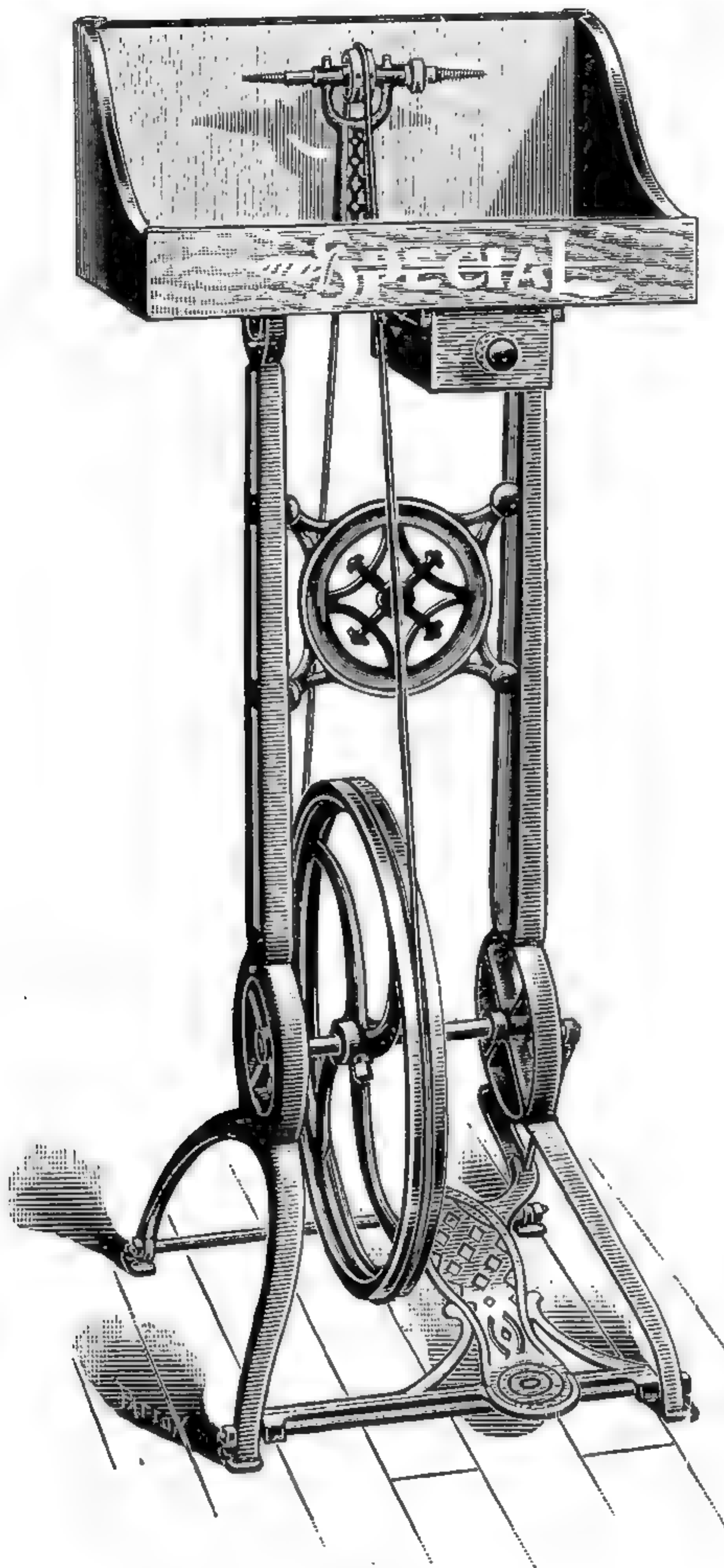
Gross " — Domestic Shipment, about 72 lbs.

" " — Foreign " 90 "

Dimensions — " " 40" x 19" x 10".



The Special Polishing Lathe



The box top, 12" x 18", is made of finely finished hardwood, lined with heavy zinc.

Price, without head, \$10.50.

" with No. 0 head, as in cut (Gammen), \$11.75.

" " No. 0C head (Granule), \$12.00.

Net Weight — 67 lbs.

Gross " — Domestic Shipment, about 80 lbs.

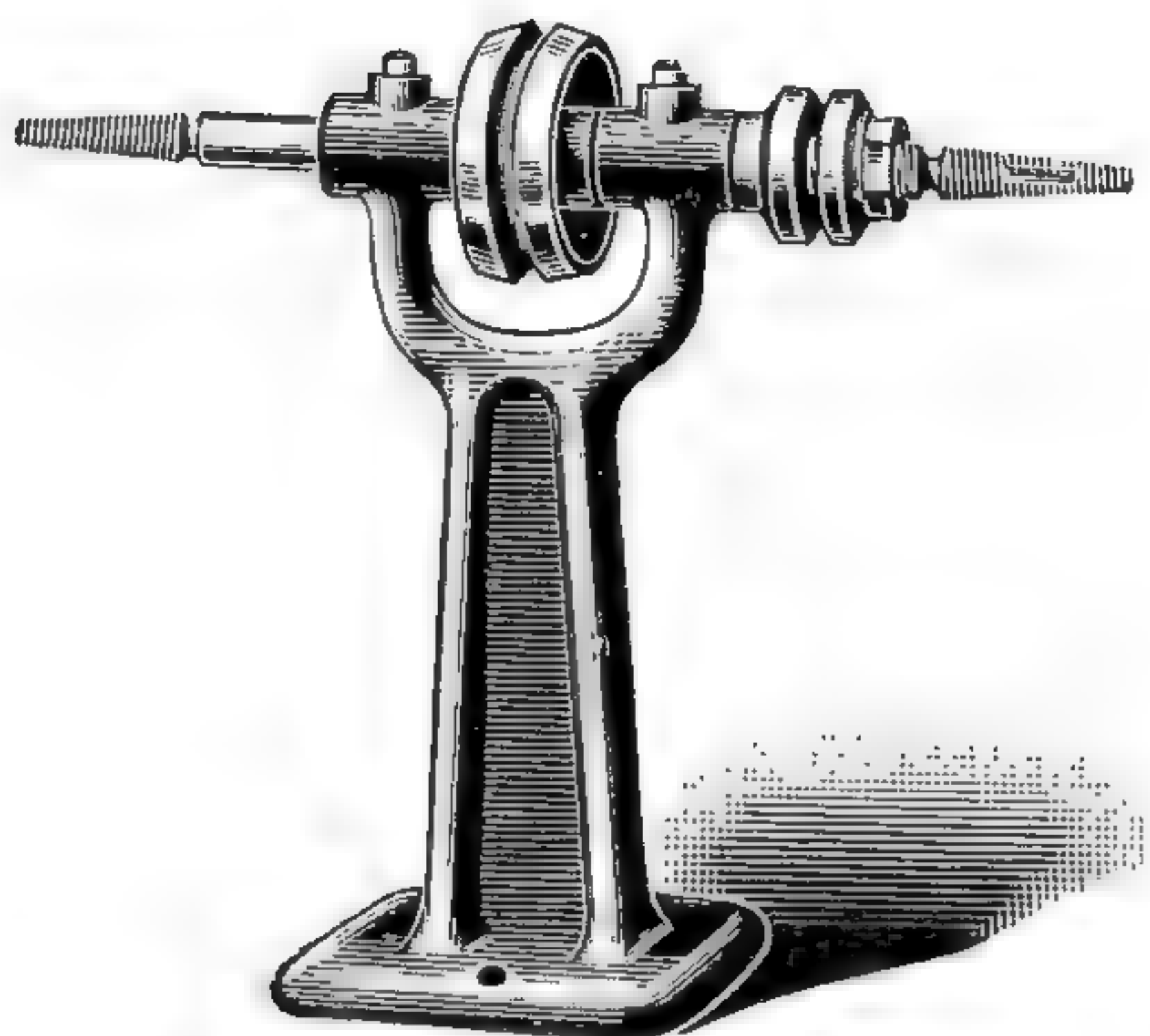
" " — Foreign " 105 "

Dimensions — " " 2 Boxes,

21" x 14" x 11"—40" x 19" x 7".



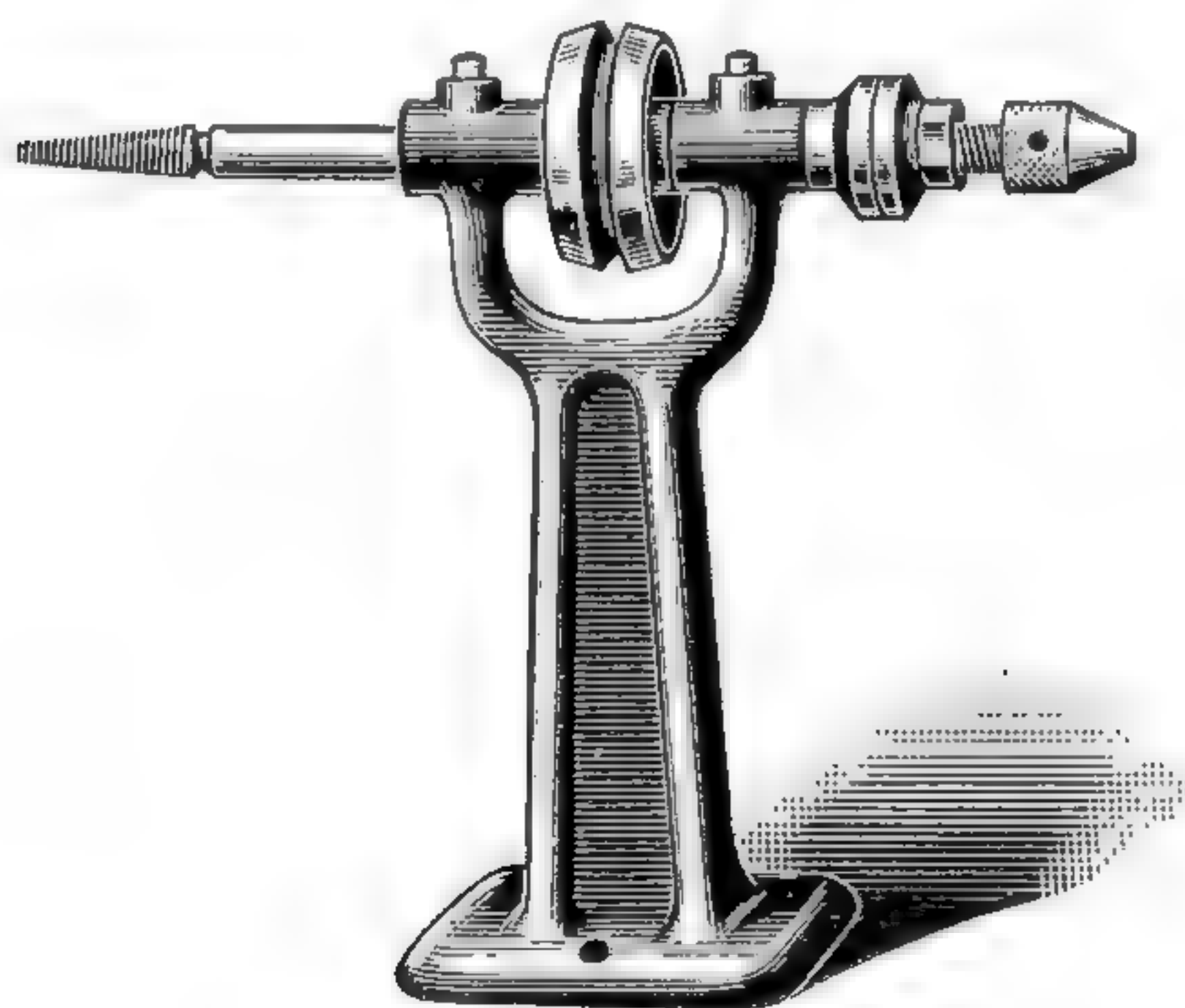
Polishing Heads



Height, 6"; with steel spindle 8" long and $\frac{3}{8}$ " diameter. Has dust-proof oilers. Each head packed in separate box.

No. 0 — (Ganch), \$1.25.

Weight — $2\frac{1}{2}$ lbs.

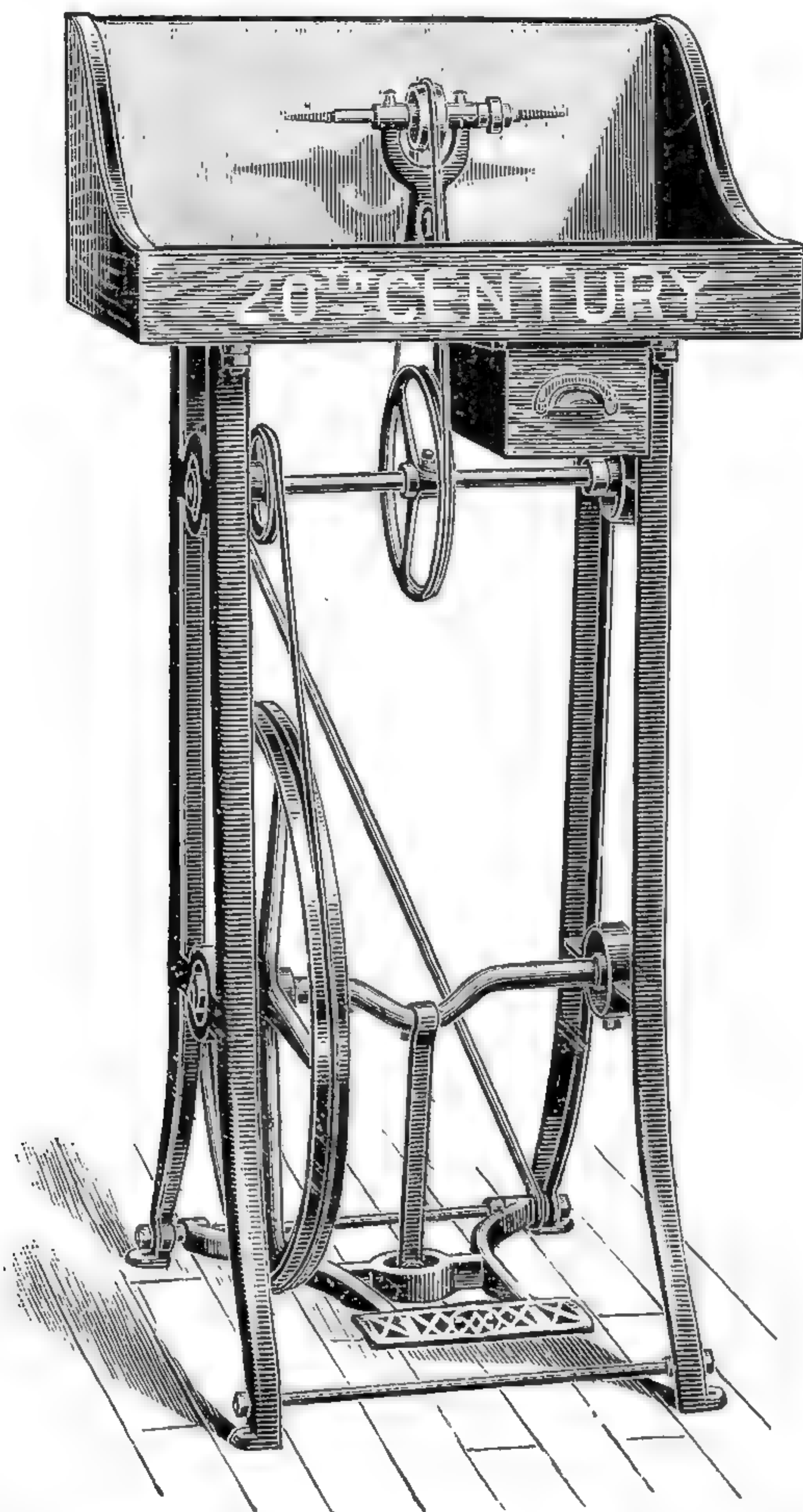


Height, 6"; with steel spindle 8" long and $\frac{3}{8}$ " diameter. This head is fitted with a small steel chuck.

No. 0C — (Gangue), \$1.50.



No. 1 — Polishing Lathe



The driving-wheel, 21" in diameter, weighing 25 lbs., belts to a 4" pulley on an intermediate shaft, and from an 8" pulley on that shaft to the head.

Both shafts of steel run in self-adjusting babbitted boxes, making the alignment perfect.

The box top, 15" x 23", is made of finely finished hardwood, lined with heavy zinc.

Price, without head, \$14.00.

" with No. 1 head as in cut (Ganza), \$16.00.

" " No. 1C head (Gardon), \$17.25.

Net Weight — 90 lbs.

Gross " — Domestic Shipment, about 105 lbs.

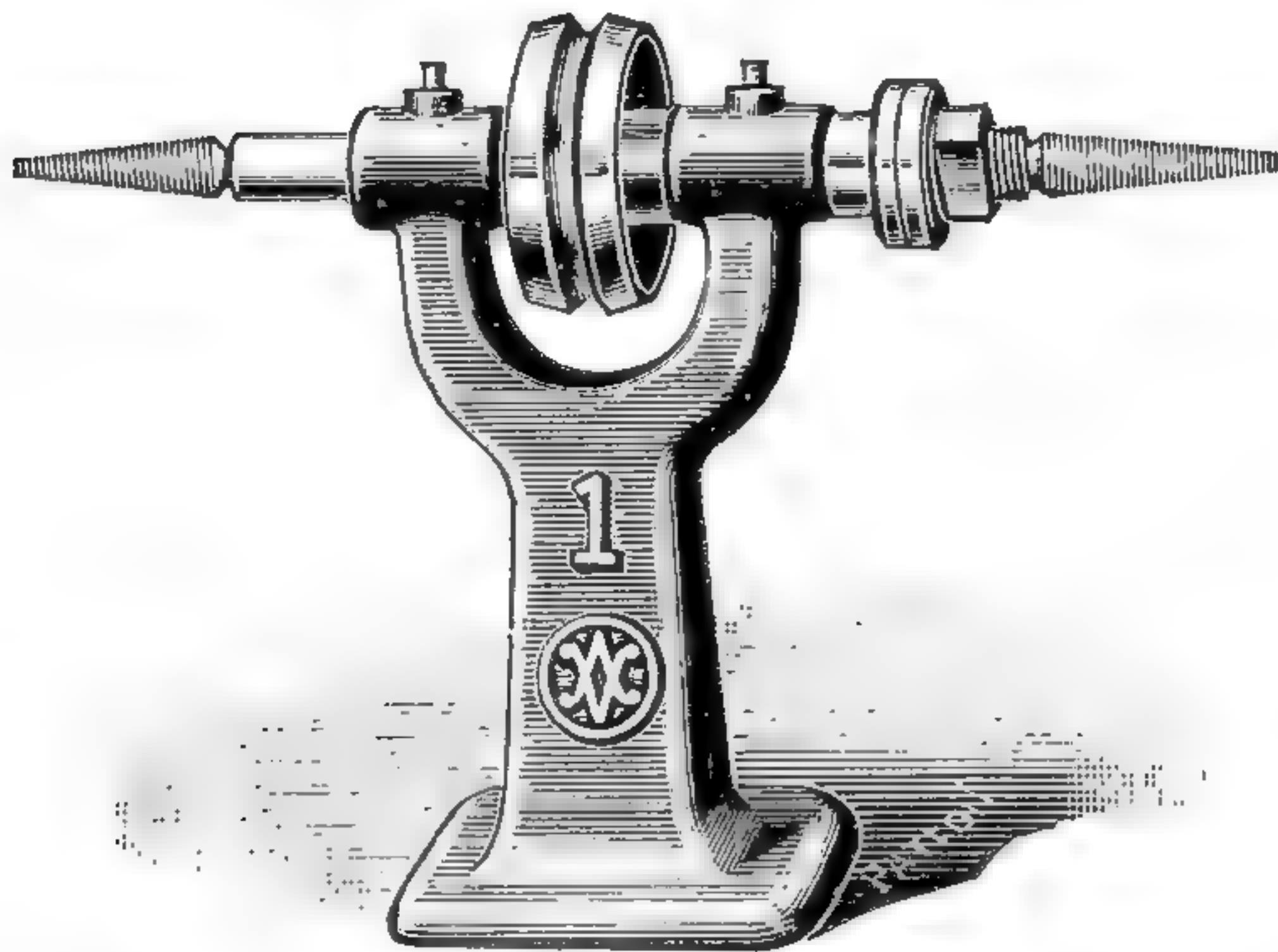
" " — Foreign " 155 "

Dimensions —

2 Boxes,
25" x 17" x 12" — 41" x 26" x 8".

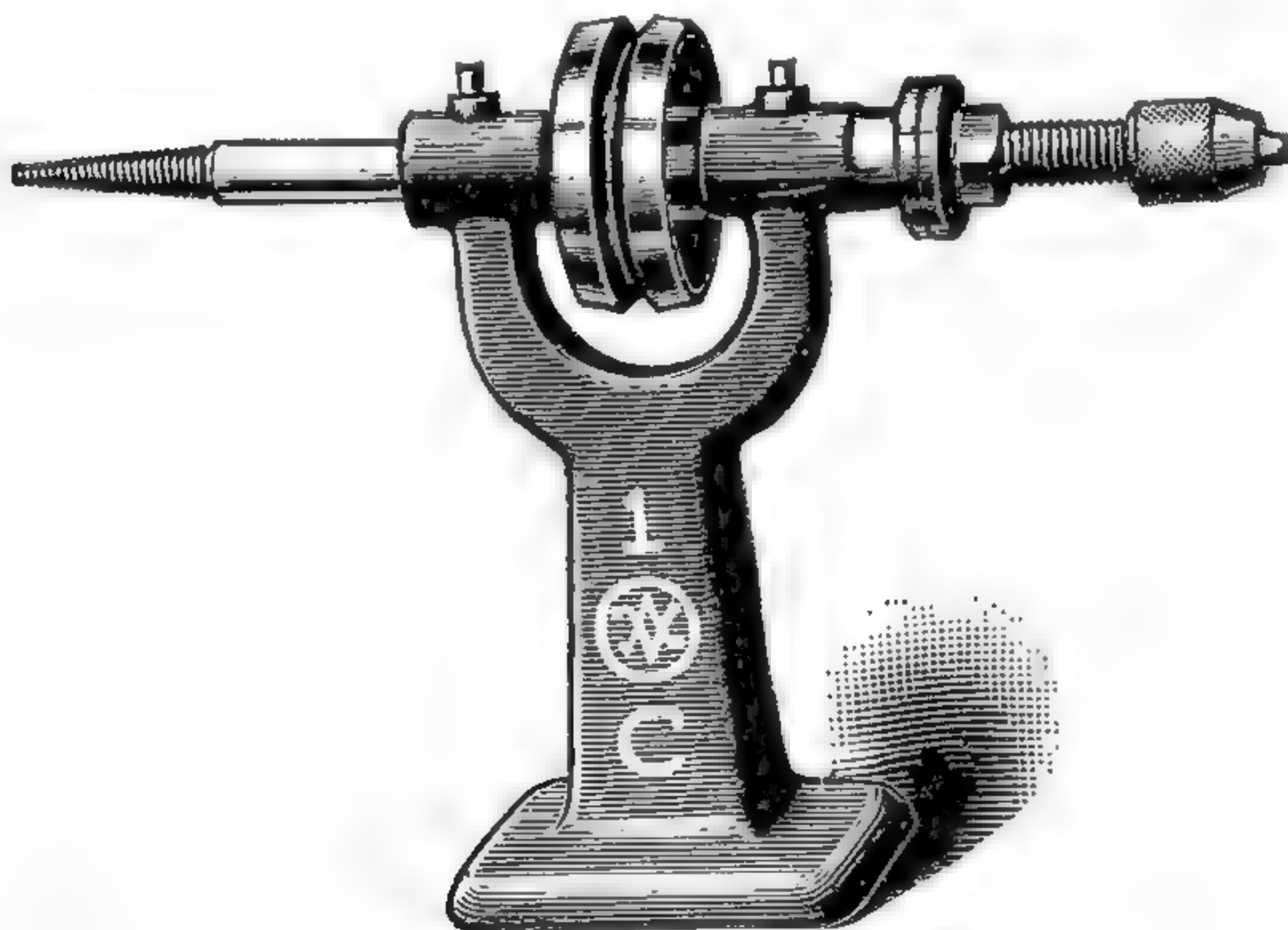


Polishing Heads



Height, 6"; with steel spindle 10" long and $\frac{1}{2}$ " diameter. Has dust-proof oilers.

No. 1 — (Garons). Price, \$2.00.
Weight — 4 lbs.



Height, 6"; with a ground steel spindle 10" long and $\frac{1}{2}$ " diameter. The widest space between the flanges is $\frac{5}{8}$ ". This head is fitted with our No. 1 Niagara Drill Chuck, which holds any size drill up to $\frac{3}{16}$ " diameter.

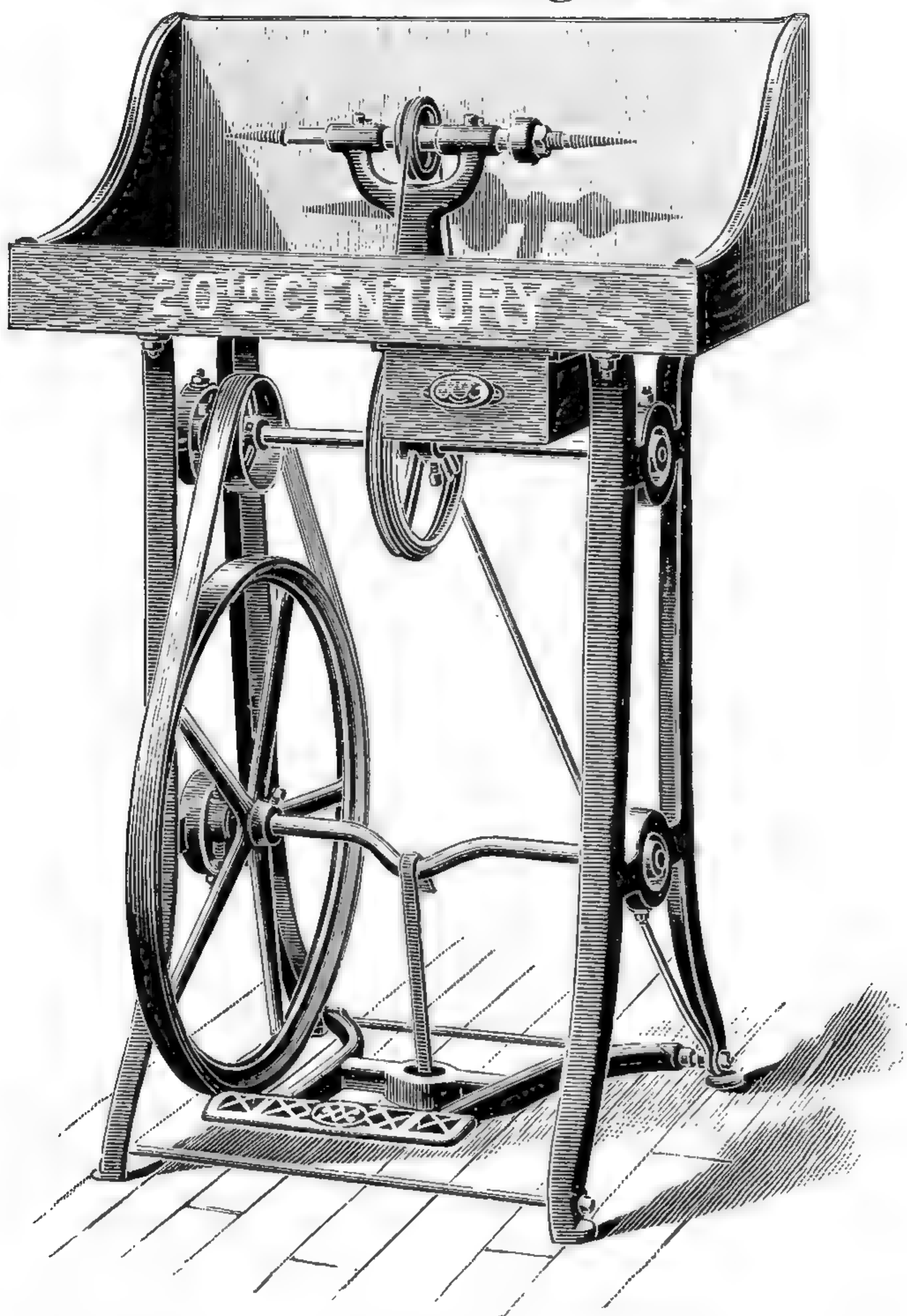
No. 1C — (Garth) Price, \$3.25.

OLIVER



QUALITY

No. 2 — Polishing Lathe



The driving-wheel, 24" in diameter, weighing 35 lbs., belts to a 5" pulley on the intermediate shaft, and from a 10" pulley on that shaft to the head.

Both shafts of steel run in self-adjusting babbitted boxes, making the alignment perfect.

The box top, 17" x 30", is made of finely-finished hardwood, lined with heavy zinc.

Price, without head, \$16.50.

" with No. 2 head (Gault), \$20.50.

" " No. 2C head (Gawby), \$22.00.

" " No. 3 head, as in cut (Gawn), \$22.50.

Net Weight — 140 lbs.

Gross " — Domestic Shipment, about 160 lbs.

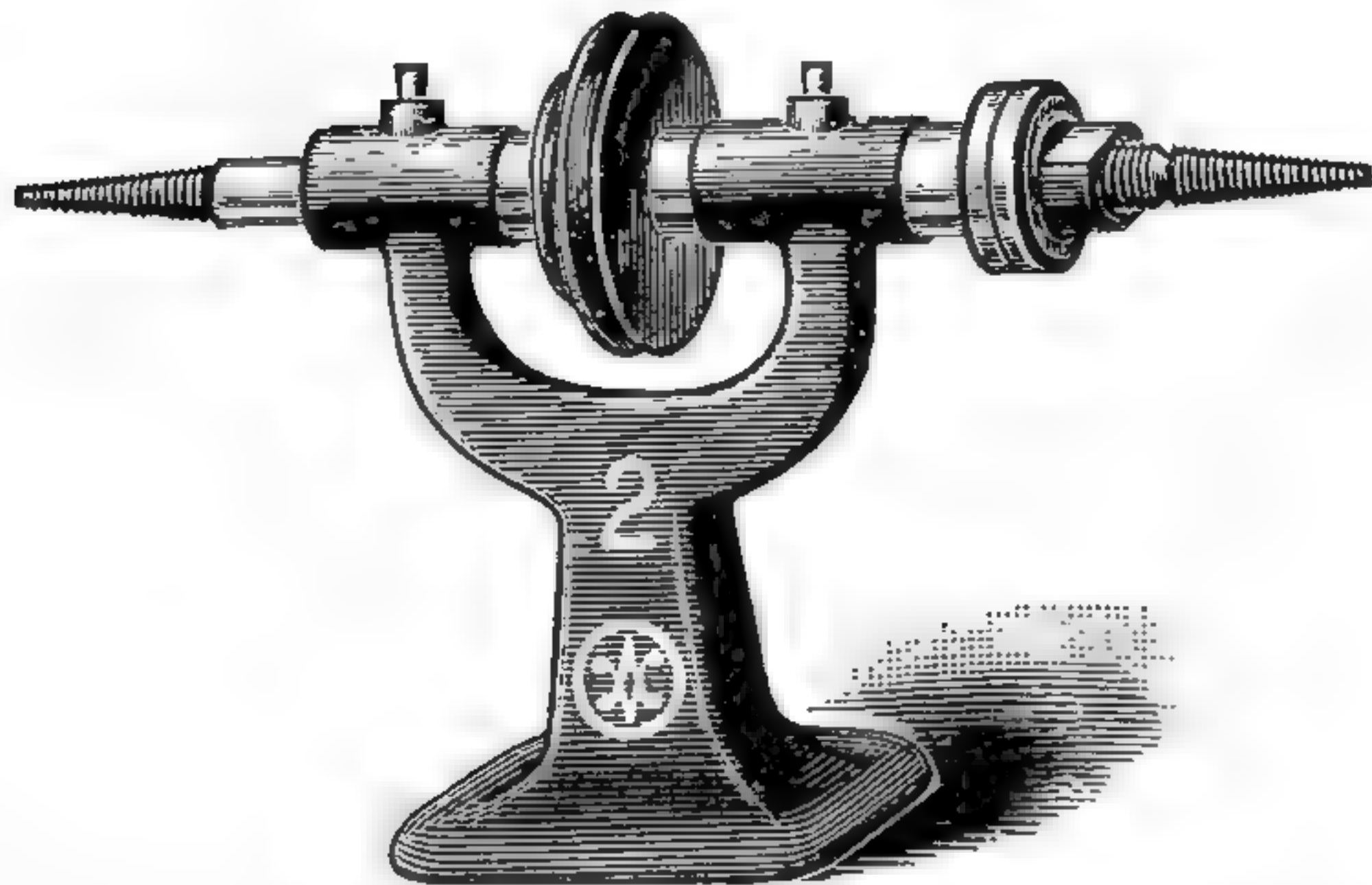
" " — Foreign " 190 "

Dimensions —

" 2 Boxes,
40" x 26" x 7" — 33" x 18" x 14".



Polishing Heads

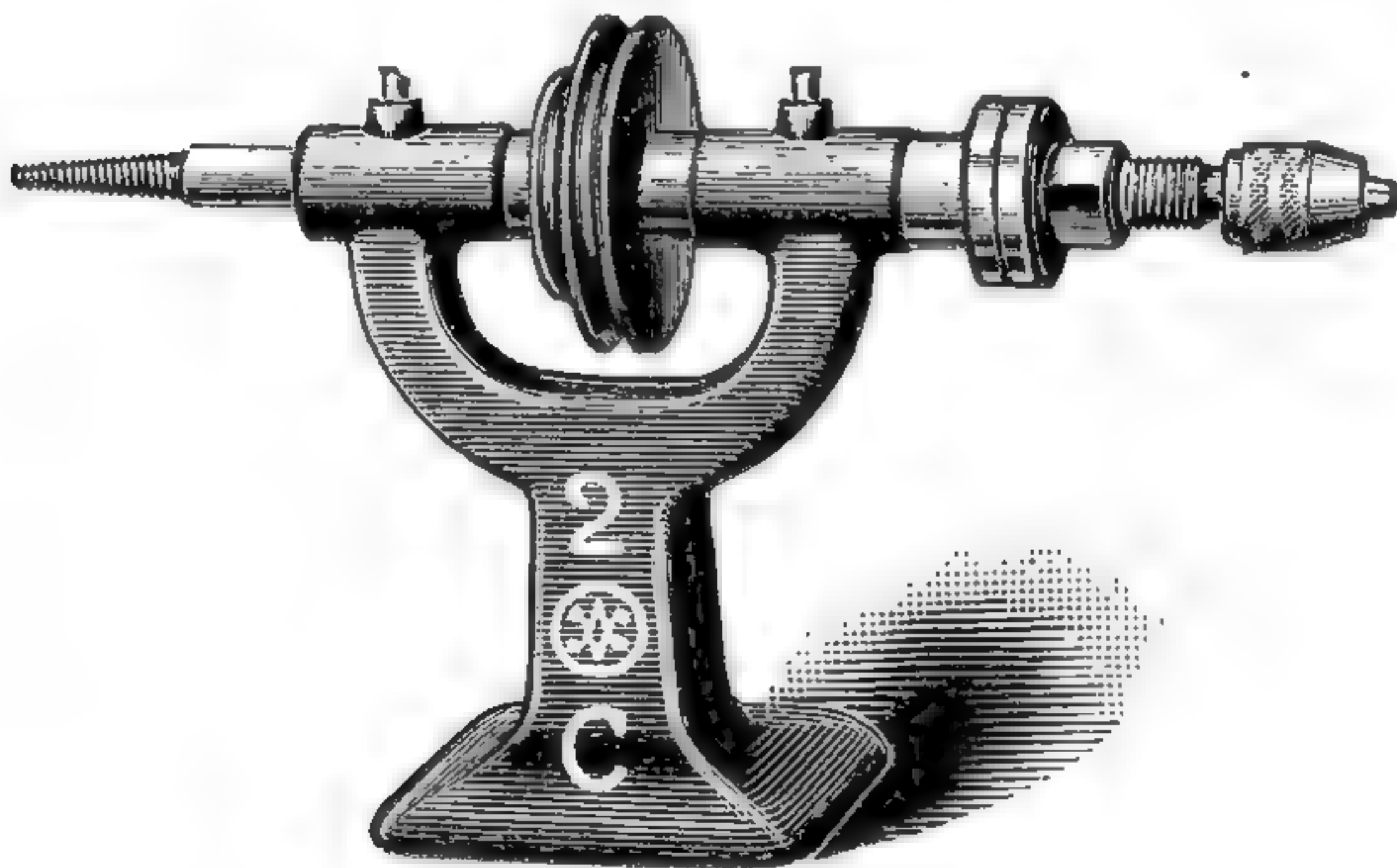


Height to center of spindle, 6"; length of spindle, 13"; diameter of spindle between flanges, $\frac{5}{8}$ "; extreme space between flanges, $\frac{1}{2}$ ". Has dust-proof oilers.

No. 2— With cone pulley, as in cut (Gazet), Price, \$4.00

No. 2— " single flat pulley (Gazon), . . . " 4.00

Weight — 7 lbs.



Height to center of spindle, 6"; length of spindle, 13"; diameter of spindle between flanges, $\frac{5}{8}$ "; extreme space between flanges, 1".

This head is fitted with our No. 2 Niagara Drill Chuck, which holds any size drill up to $\frac{1}{4}$ " diameter.

No. 2C— With cone pulley, as in cut (Geck), . Price, \$5.50

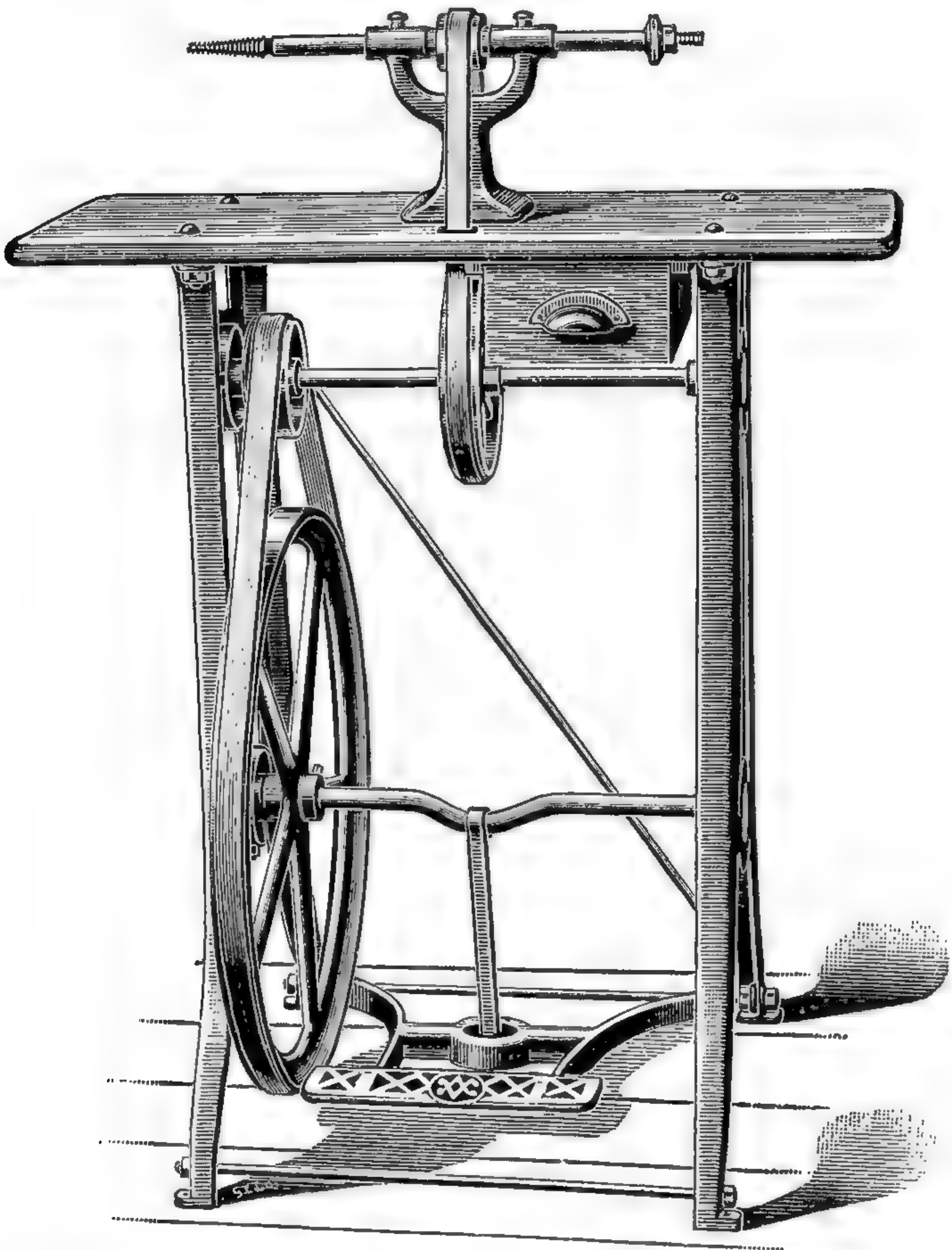
No. 2C— " single flat pulley (Glin), . . . " 5.50

OLIVER



QUALITY

No. 2A Flat Top Polishing Lathe



This lathe is designed for light buffing and polishing required by gold and silver platers. It stands 38" high to top of table, which is 16" x 34". The diameter of driving wheel is 24", and pulleys on the intermediate shaft are 5" and 8". The steel shafts run in self-adjusting babbitted boxes, making the alignment perfect.

Price, without head, \$14.00.

" with No. 3A head (Gemel), \$20.00.

Net Weight — 130 lbs.

Gross " — Domestic Shipment, about 150 lbs.

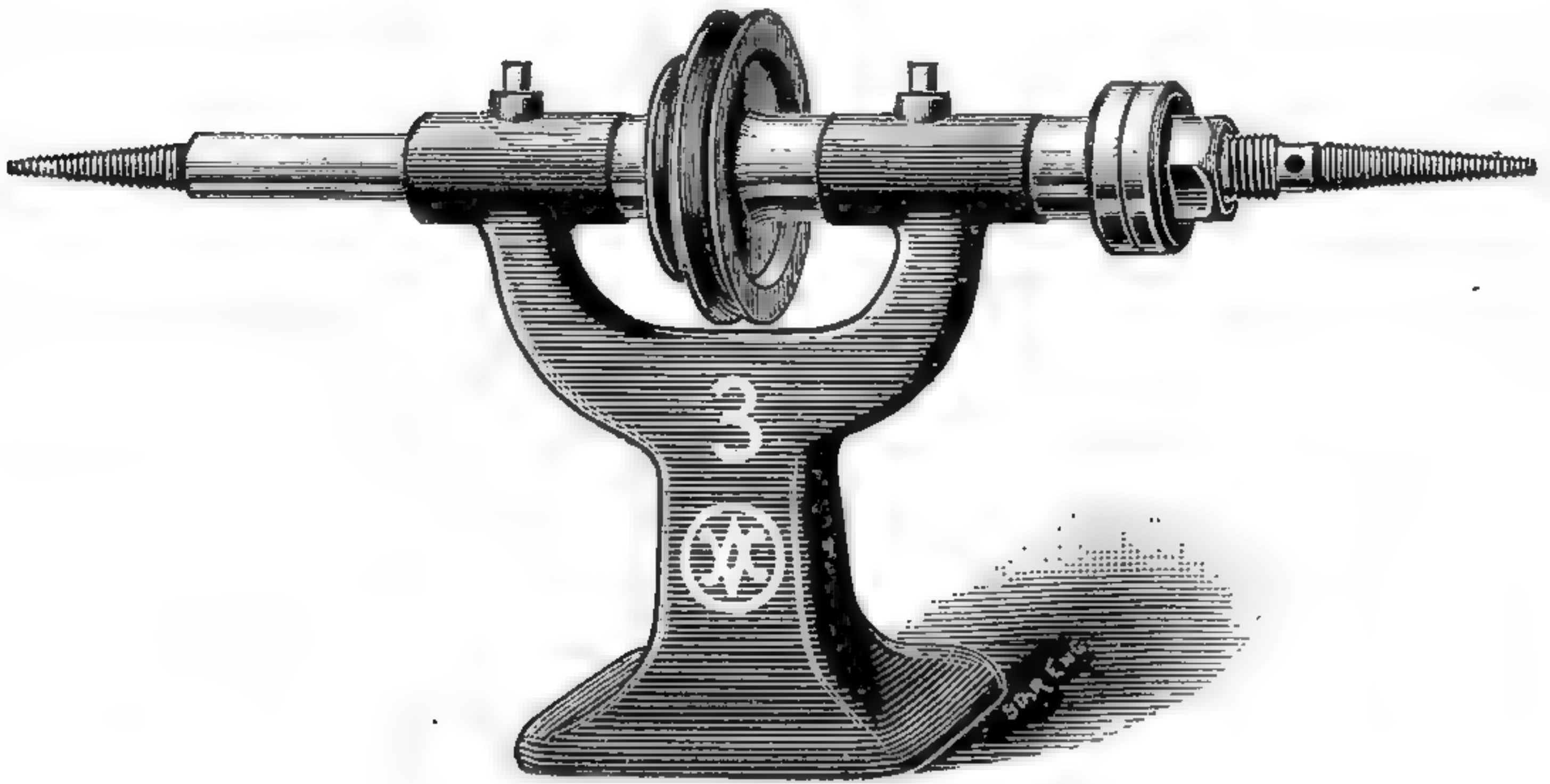
" " — Foreign " 175 "

Dimensions — " " 2 Boxes,

40" x 26" x 7" — 36" x 18" x 7".



Polishing Heads



- No. 3**— With cone pulley, as in cut (Genet), . Price, \$6.00
No. 3— “ single flat pulley (Genie), . . . “ 6.00
No. 3— “ tight and loose flat pulleys (Geode), “ 7.00

Height to center of spindle — 7".

Length of spindle — 18".

Diameter of spindle — $\frac{3}{4}$ ".

Extreme space between flanges — $\frac{1}{2}$ ".

Length of bearings — $2\frac{1}{4}$ ".

Size of single flat pulley — $2\frac{1}{4}$ " x $1\frac{3}{4}$ ".

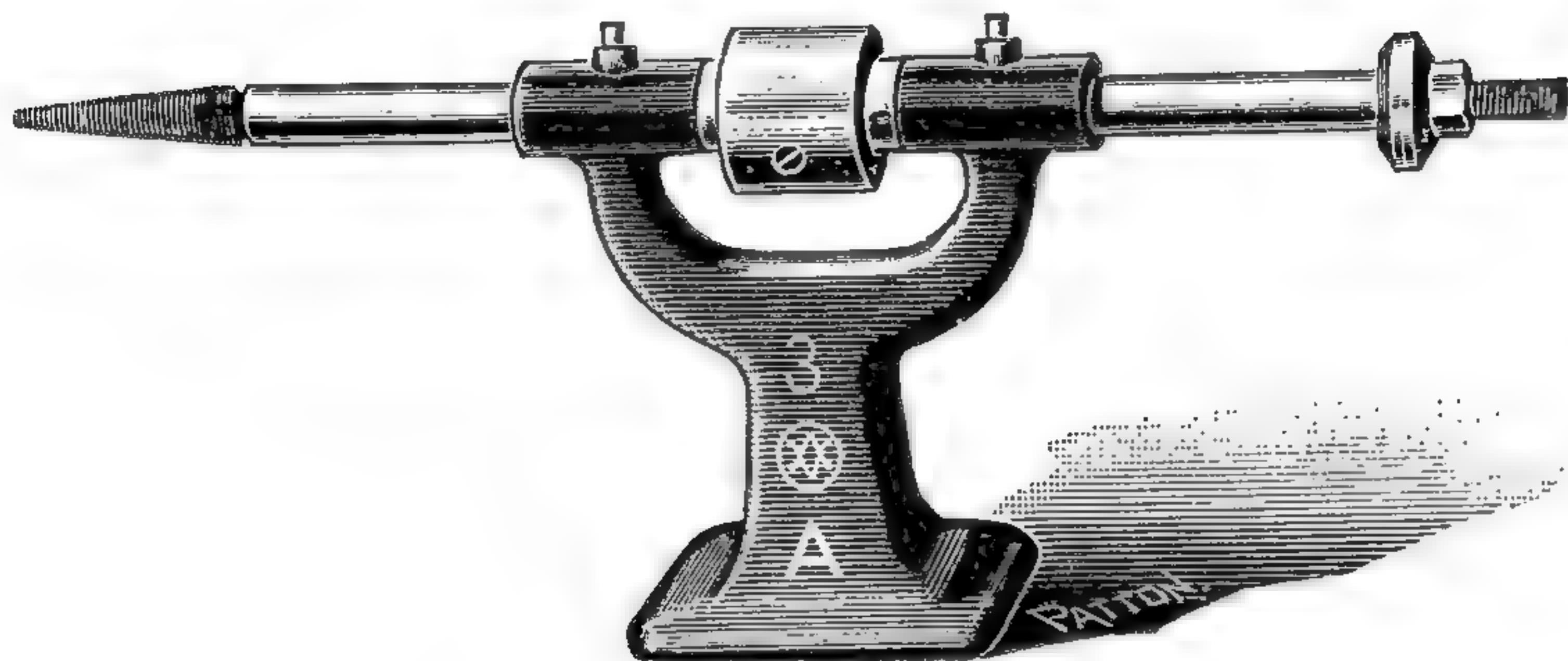
Size of tight and loose pulleys — $2\frac{1}{2}$ " x $1\frac{1}{8}$ ".

Weight — 10 lbs.

The taper-screw tip on the right is removable, and is 3" long.



Polishing Heads



- No. 3A** — With single flat pulley, as in cut (Gibbe),
 Price, \$6.00
- No. 3A** — “ tight and loose pulleys (Gunbal), “ 7.00

Height to center of spindle — 7".

Length of spindle — 20".

Diameter of spindle in boxes — $\frac{3}{4}$ ".

“ “ “ between flanges — $\frac{5}{8}$ ".

Length of bearings — $2\frac{1}{4}$ ".

Size of single flat pulley — $2\frac{1}{4}$ " x $1\frac{3}{4}$ ".

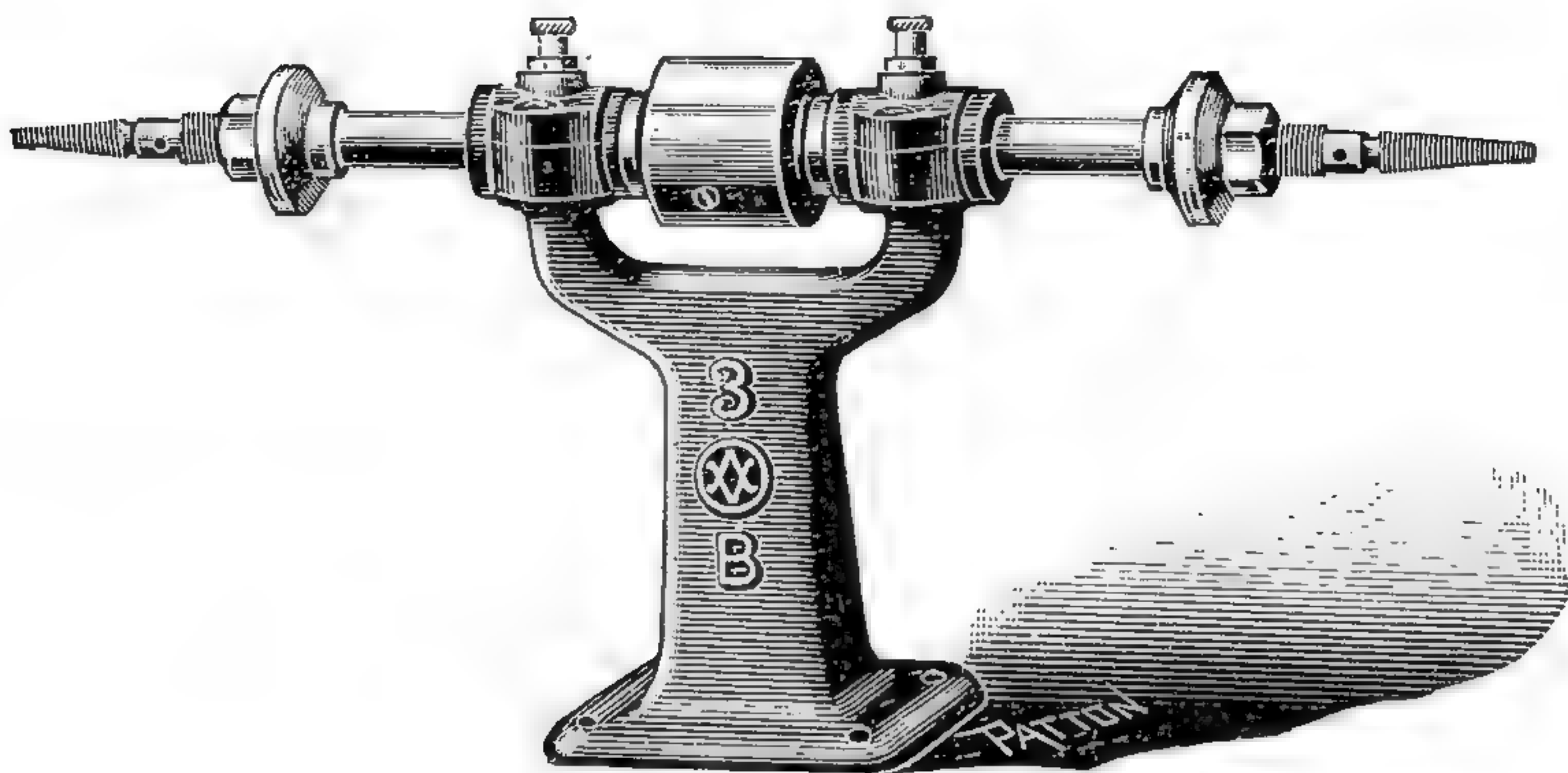
“ “ tight and loose pulleys — $2\frac{1}{2}$ " x $1\frac{1}{8}$ ".

Extreme space between flanges — $\frac{3}{4}$ ".

Weight — 10 lbs.



Polishing Heads



These heads are built with only one style of spindle, but with three different heights to center of spindle: 8", 10", and 12". They have bab-bitted boxes, and are perfectly constructed. The taper-screw tips are removable, and are 3" long.

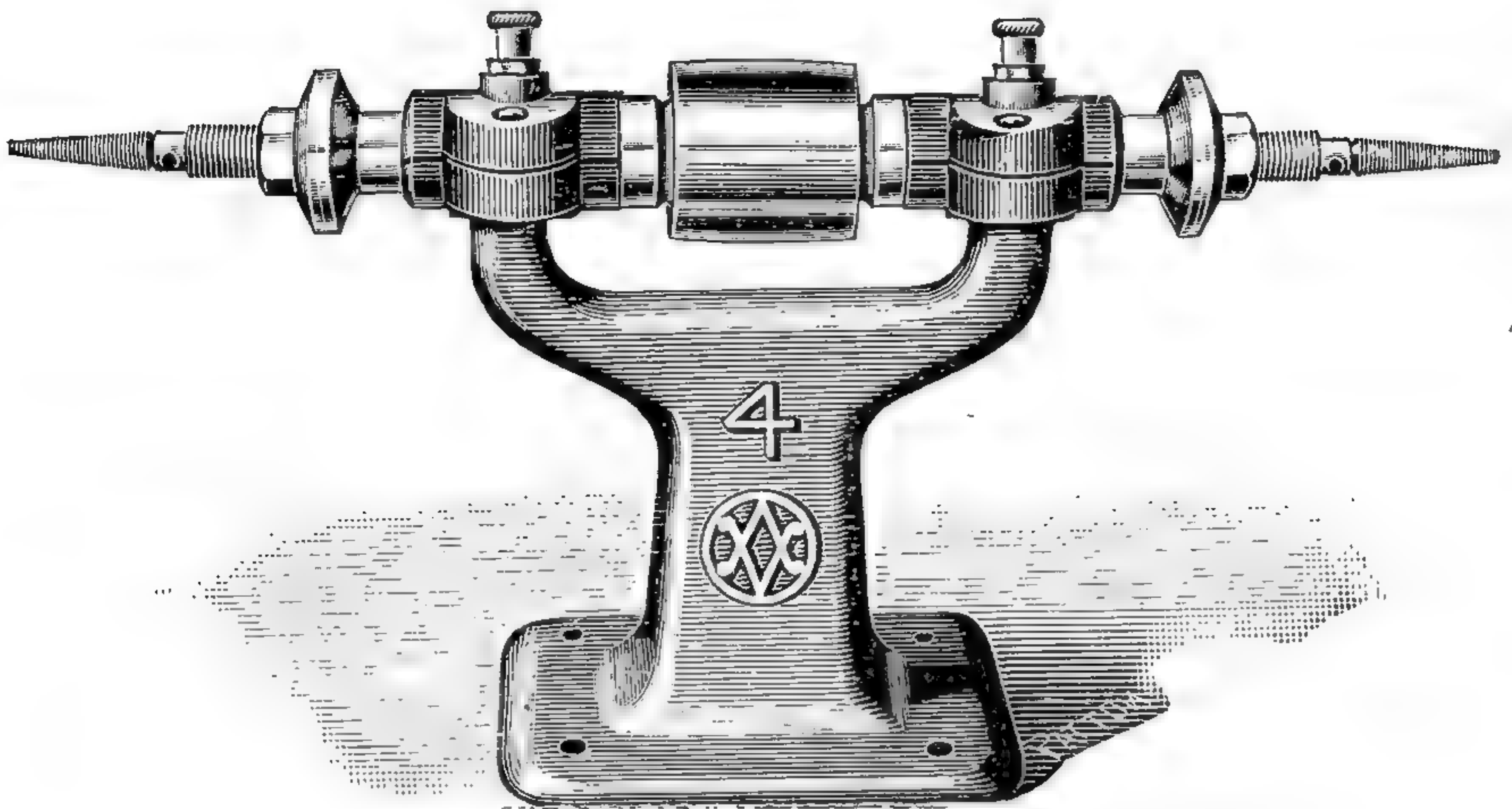
Size of base, 6" x 6"; length of spindle, 22"; diameter of spindle in boxes, $\frac{3}{4}$ "; diameter of spindle between flanges, $\frac{5}{8}$ "; extreme space between flanges, $\frac{3}{4}$ "; length of bearings, $2\frac{1}{4}$ "; size of tight and loose pulleys, $2\frac{1}{4}$ " x $1\frac{3}{8}$ "; size of single flat pulley, $2\frac{1}{4}$ " x 2".

	Height		Single Flat Pulley	Tight and Loose Pulleys
No. 3B —	8"	(Gild),	\$ 8.00	(Gyves), \$ 9.00
No. 3B —	10"	(Gimp),	9.00	(Gyrate), 10.00
No. 3B —	12"	(Gin),	10.00	(Gusset), 11.00

Net Weight — About 18 lbs.



Polishing Heads



This line of heads is adapted for heavy buffing. They have babbitted boxes, and are built with four styles of spindles, designated A, B, C, D, as illustrated on page 99.

The taper-screw tips are removable, and are 3" long.

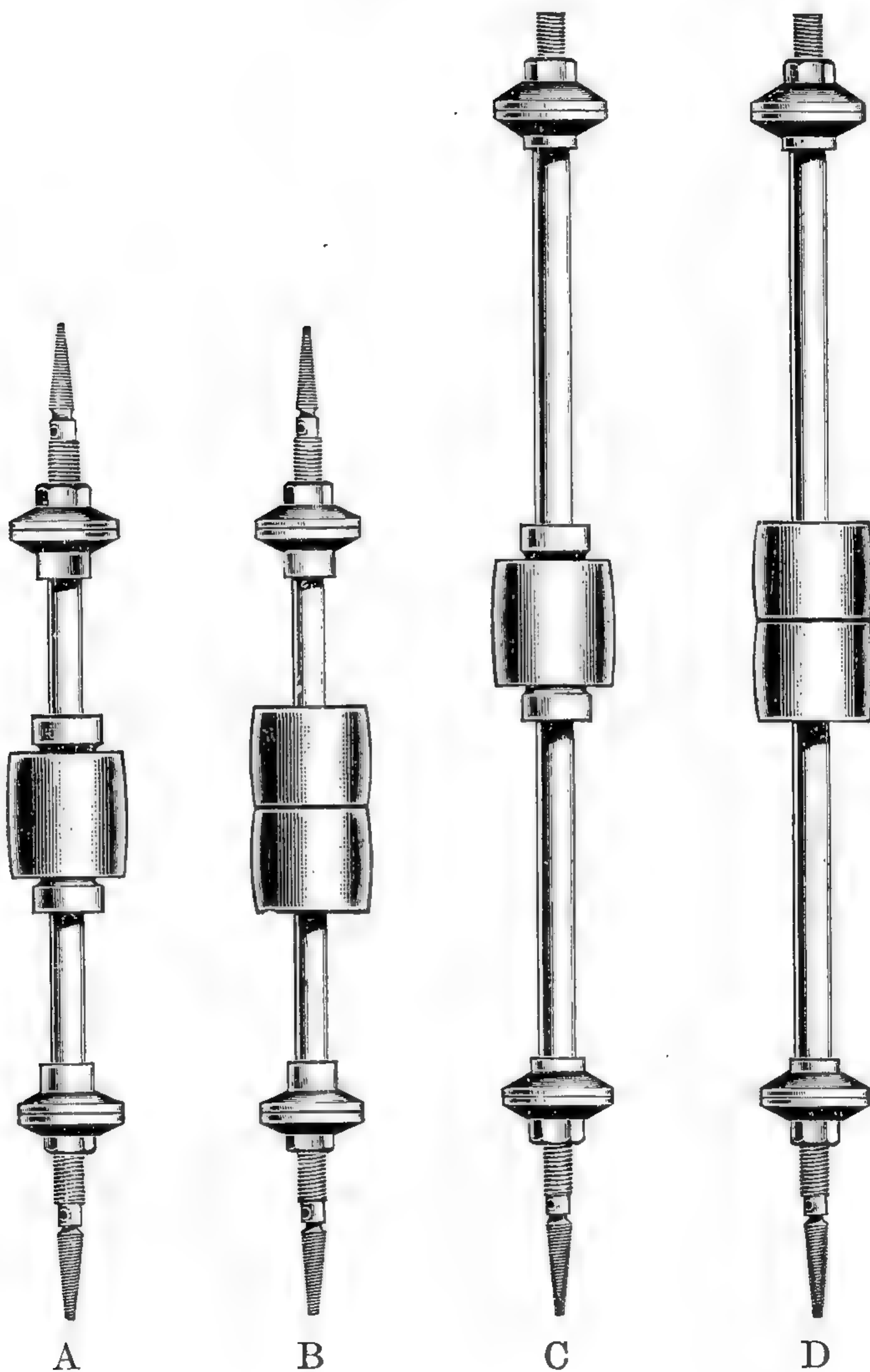
Size of base, 7" x 8"; height to center of spindle, 9"; length of A and B spindles with a screw tip at each end, 23"; length of C and D spindles with a screw tip at one end only, 27"; diameter of spindle in boxes, $\frac{15}{16}$ "; diameter of spindle between flanges, $\frac{3}{4}$ "; extreme space between flanges, 1"; length of bearings, 3"; size of single flat pulley, $2\frac{3}{4}$ " x $2\frac{3}{4}$ "; size of tight and loose pulleys, $2\frac{3}{4}$ " x 2".

No. 4	—	With A Spindle (Ginger),	Price, \$12.00
No. 4	—	" B " (Gipsy),	" 14.00
No. 4	—	" C " (Grist),	" 12.00
No. 4	—	" D " (Groat),	" 14.00

Net Weight — about 30 lbs.



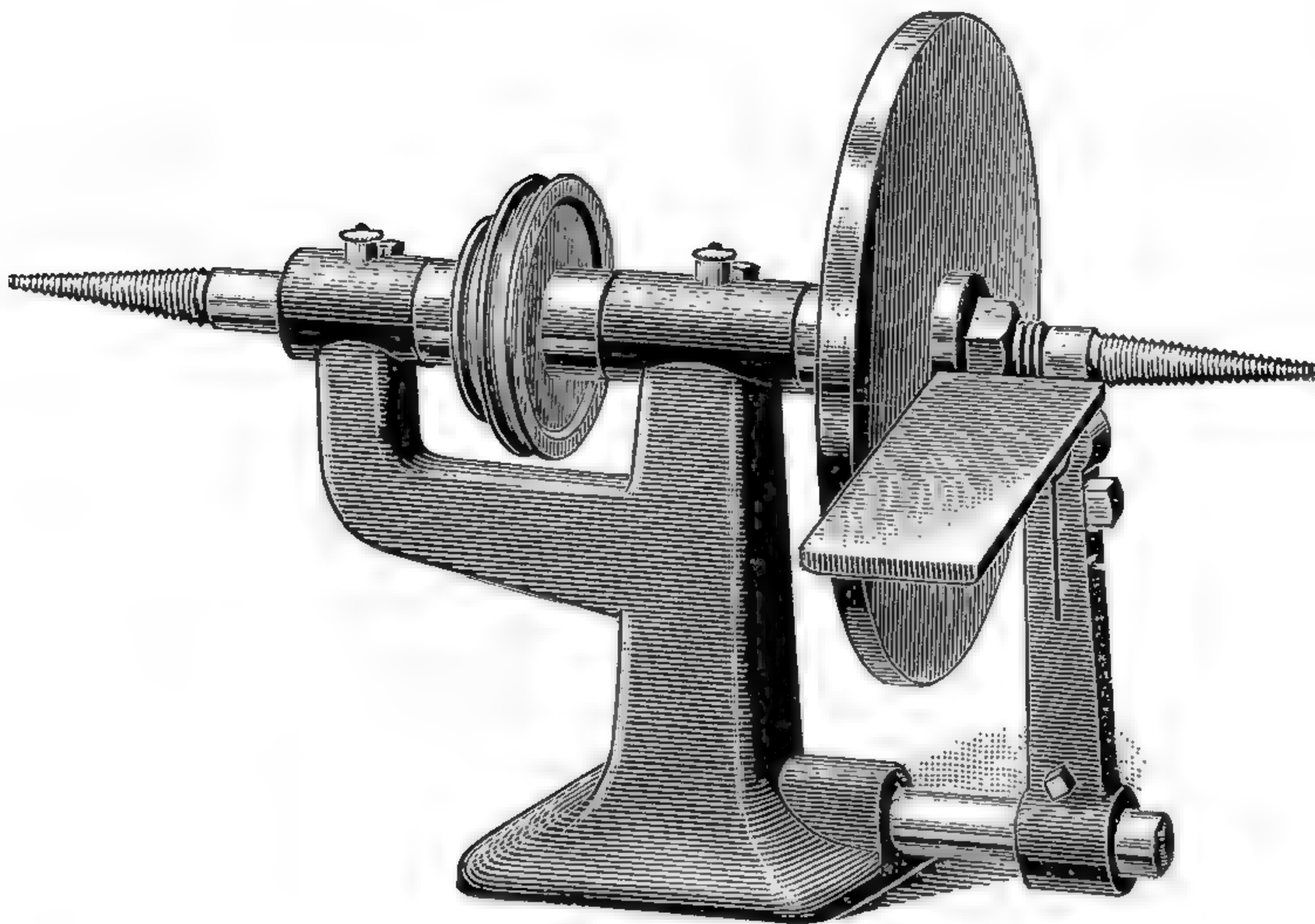
Spindles



Styles of spindles used in the No. 4 Polishing Heads.



No. 3 Lap Head



The above illustration shows our combined lap and polishing head, which we build in one size only. The rest is adjustable to different angles. They have split bearings with screw adjustment for taking up the wear.

- | | | |
|----------------|-------------------------------------|---------------|
| No. 3 — | With cone pulley, as in cut (Gise), | Price, \$7.00 |
| No. 3 — | “ single flat pulley (Gith), . . . | “ 7.00 |
| No. 3 — | “ tight and loose pulleys (Glacis), | “ 8.00 |

The prices given are without lap.

Length of spindle — 18".

Diameter of spindle — $\frac{3}{4}$ ".

Maximum lap capacity — 8".

Size of single flat pulley — $2\frac{1}{4}$ " x $1\frac{3}{4}$ ".

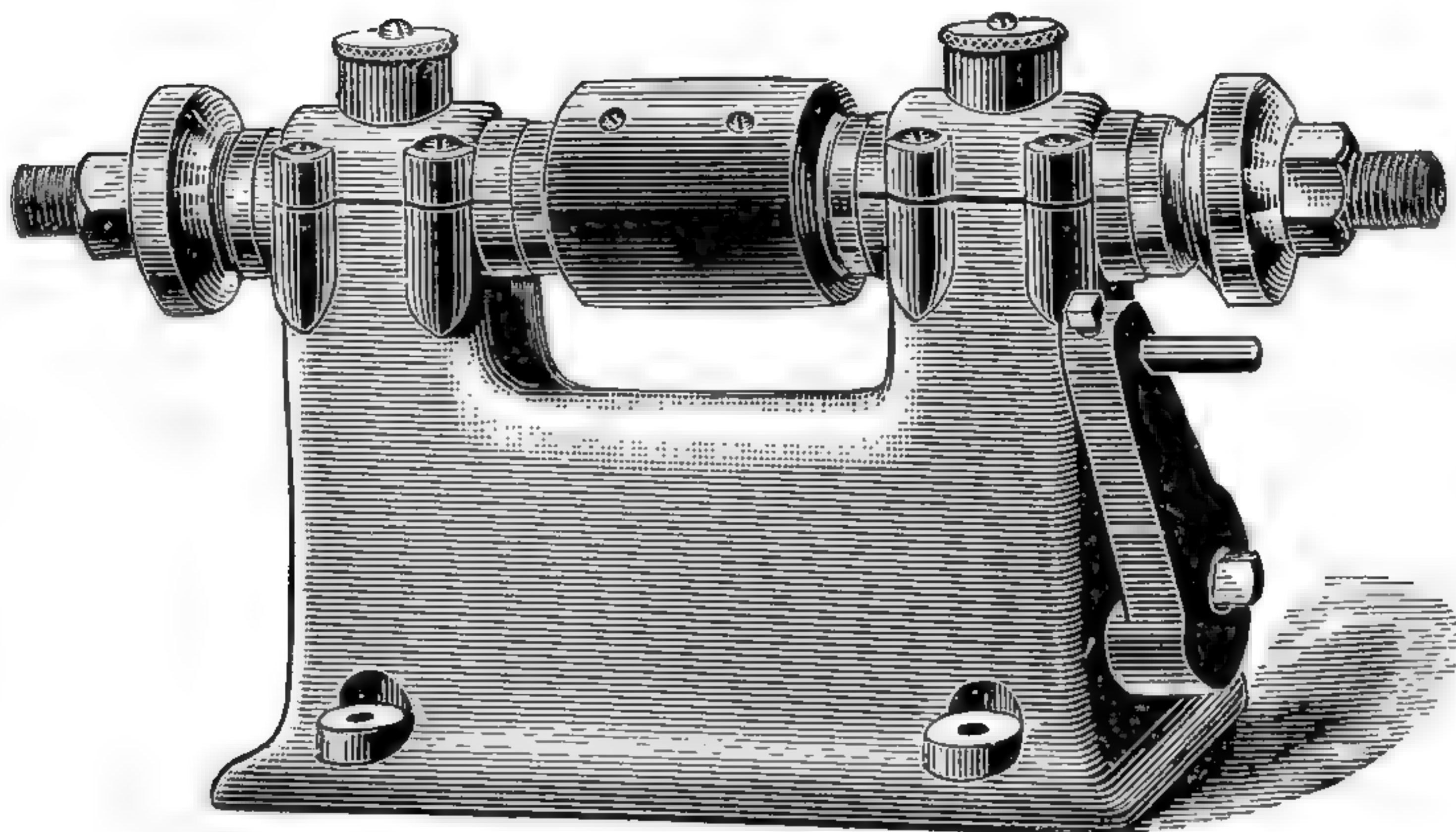
“ “ tight and loose pulleys — $2\frac{1}{2}$ " x $1\frac{1}{8}$ ".

Weight — 15 lbs.

The taper-screw tip on the right is removable, and is 3" long.



No. 5 Lap Head



We illustrate herewith a power head that is built expressly for lapping. The frame is stiff and heavy. The shaft and pulley are perfectly balanced, and the boxes are large, well babbitted, and adjustable for wear. The arm is used for a tool rest in turning off the edge of laps; it can be used at either end.

No. 5—As in cut (Glebe). Price, \$16.00.

Size of base — 7" x 12".

Length of spindle — 19".

Diameter of spindle in boxes — $1\frac{3}{16}$ ".

“ “ “ between flanges — 1".

Length of bearings — $3\frac{1}{2}$ ".

Size of pulley — 3" x $3\frac{1}{4}$ ".

Maximum lap capacity — 14".

Net Weight — 50 lbs.

Weight boxed — 65 lbs.

Dimensions Box — 22" x 13" x 10".



Foot Wheels



This is the common wheel so long in use. It is well made, and is a little heavier than the average wheels of this class.

No. 1—Price (Gleed), \$3.00.

Diameter of Wheel — 18".

Weight of Wheel — 20 lbs.

Total Weight — 33 lbs.

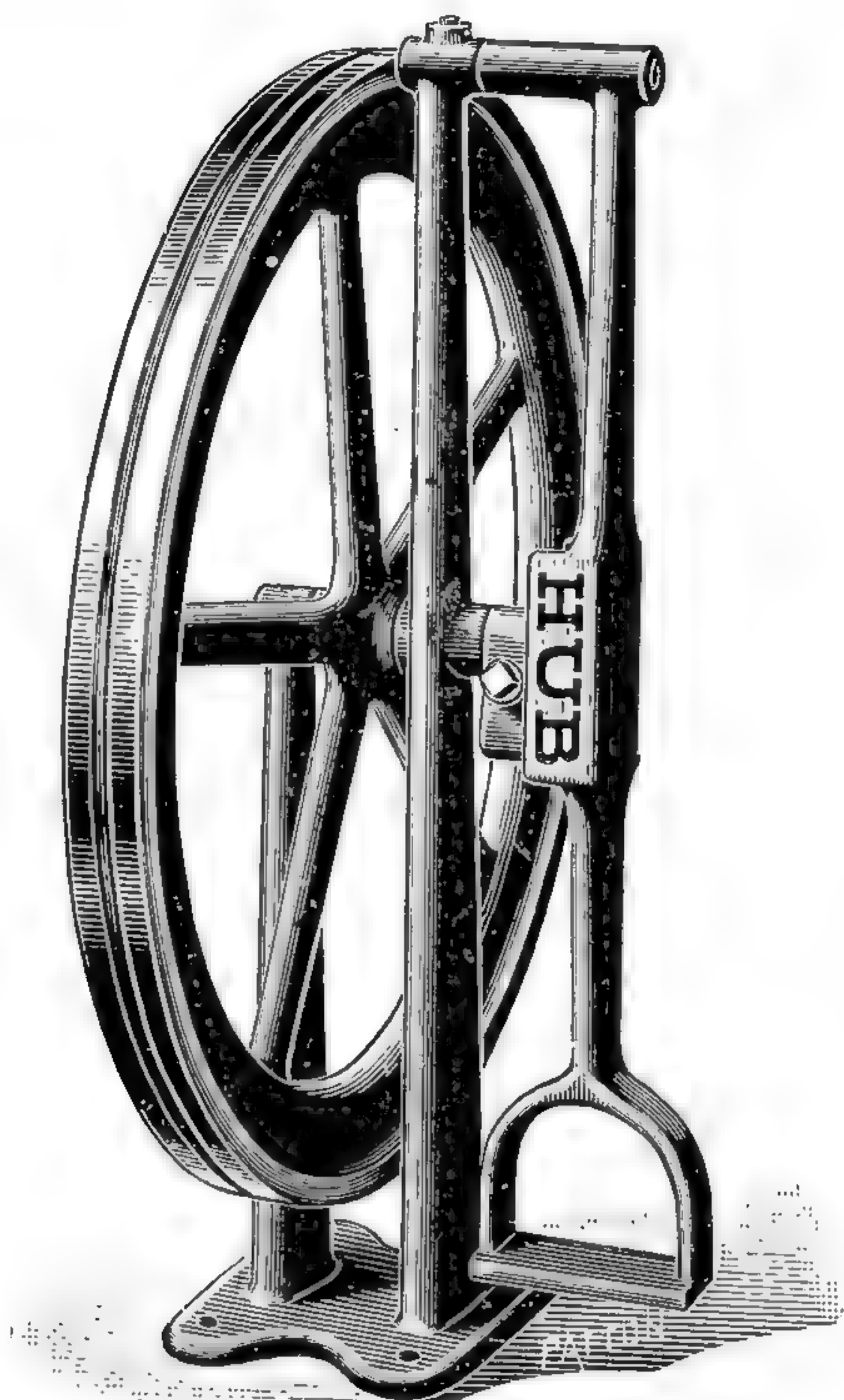
Gross Weight — Domestic Shipment, 37 lbs.

“ “ — Foreign “ 46 “

Dimensions — “ “ 23" x 20" x 7".



Foot Wheels



This is the old and universally-liked style of foot wheel. While the crank shaft is not hardened, nor are the general improvements of our other wheels used, it is equally as well made.

No. 3 Hub—Price (Glen), \$6.00.

Diameter of Wheel — 20".

Weight of Wheel — 40 lbs.

Total Weight — 60 lbs.

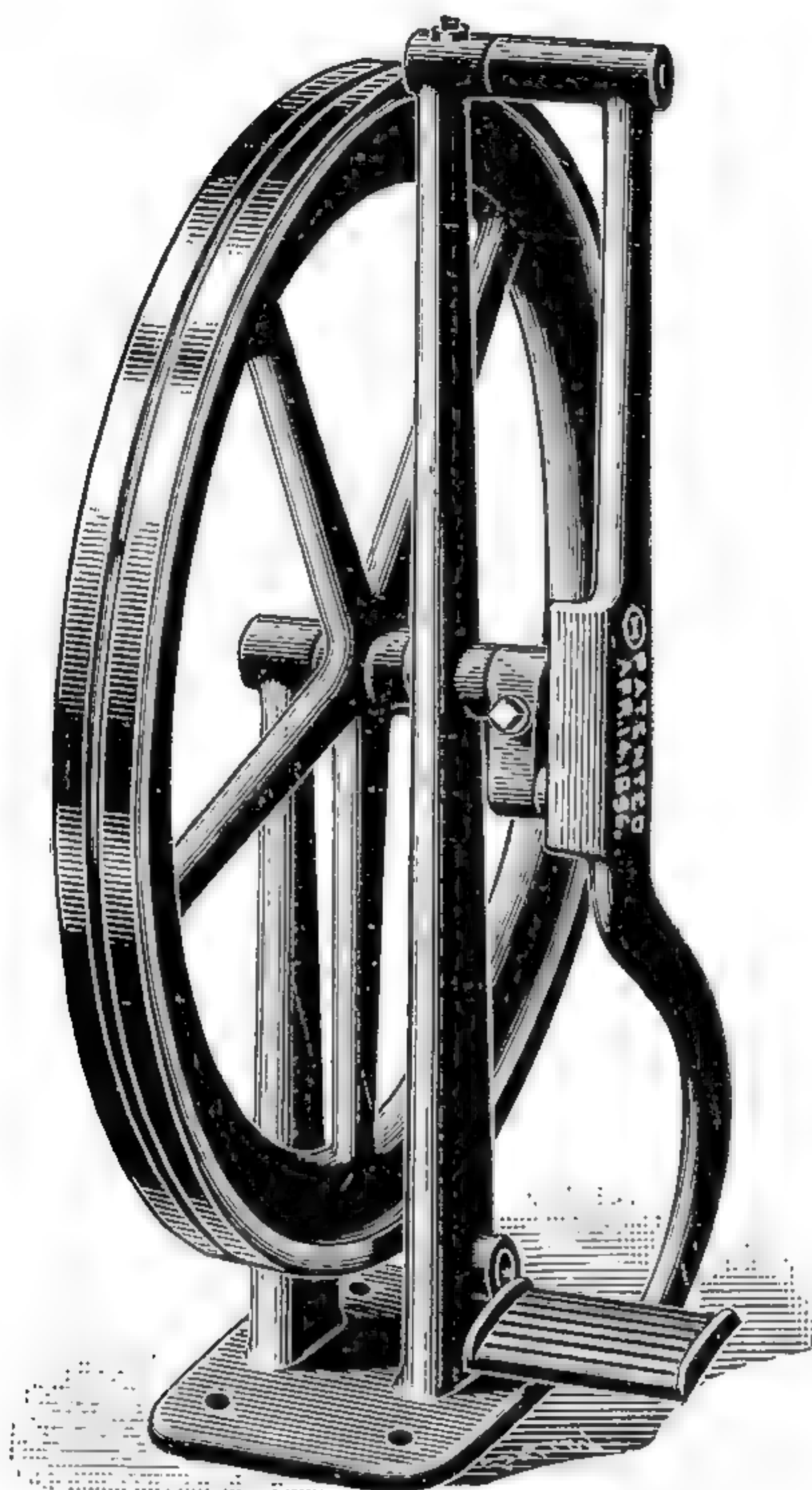
Gross Weight — Domestic Shipment, 70½ lbs.

“ “ — Foreign “ 88 “

Dimensions — “ “ 29" x 22" x 12".



Improved Foot Wheels



This is our standard wheel, long in use, imitated by other makers, but not excelled. It has the hardened crank shaft, the two fiber rollers, which reduce the friction, and the improved treadle, which allows plenty of room for the foot.

No. 3 Imp.— Price (Glib), \$6.50.

Diameter of Wheel — 20".

Weight of Wheel — 40 lbs.

Total Weight — 65 lbs.

Gross Weight — Domestic Shipment, 75 lbs.

“ “ — Foreign “ 93 “

Dimensions — “ “ 29" x 22" x 12".



Improved Foot Wheels



The watchmaker will not be so much interested in this wheel, unless he wishes to stand at his work. It is an excellent wheel to use in connection with a polishing head. Beyond the treadle, the construction is the same as the No. 3 Improved.

No. 4 Imp.— Price (Glist), \$6.50.

Diameter of Wheel — 20".

Weight of Wheel — 40 lbs.

Total Weight — 65 lbs.

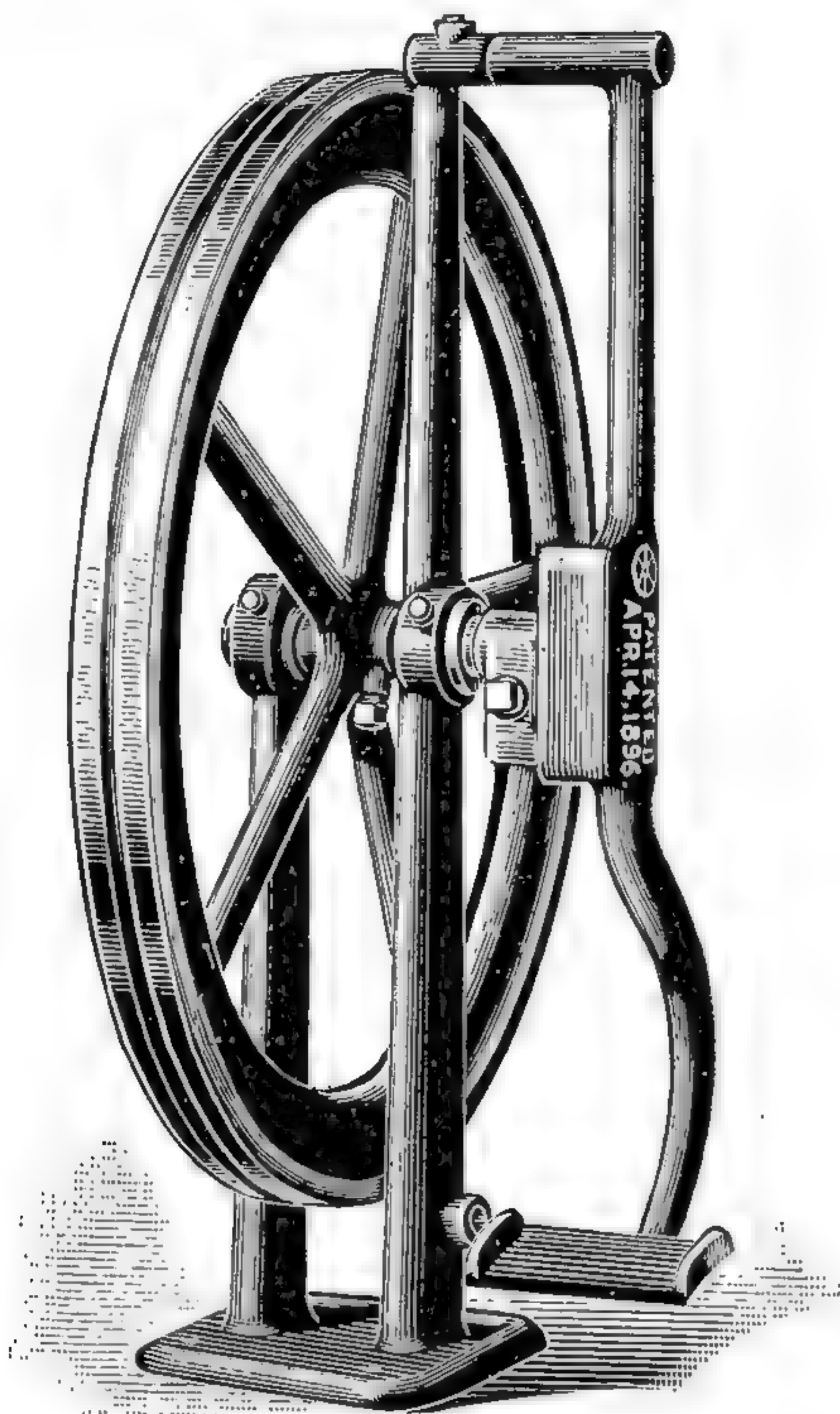
Gross Weight — Domestic Shipment, 75 lbs.

“ “ — Foreign “ 93 “

Dimensions — “ “ 29" x 22" x 12".



Ball-Bearing Foot Wheels



You know, if friction is overcome you save power; to accomplish this, you must have an easy-running bearing. This wheel has hardened bearings with hardened steel balls — reducing the friction to the minimum.

No. 3 B. B. — Price (Glode), \$7.00.

Diameter of Wheel — 20".

Weight of Wheel — 40 lbs.

Total Weight — 65 lbs.

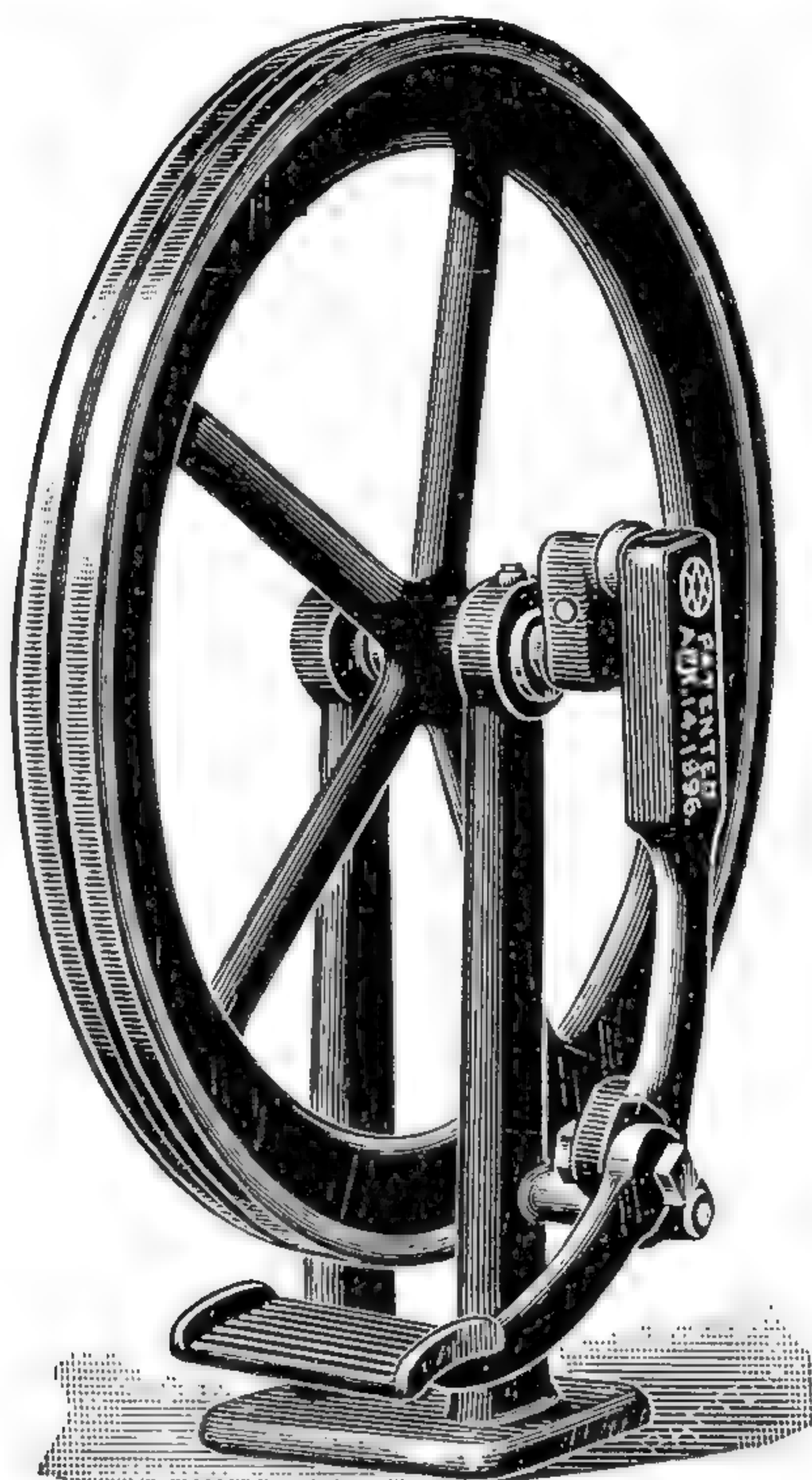
Gross Weight — Domestic Shipment, 75 lbs.

“ “ — Foreign “ 93 “

Dimensions — “ “ 29" x 22" x 12".



Ball-Bearing Foot Wheels



For an all-round foot wheel we recommend this style. The construction of the treadle with the up-and-down motion gives a machine that is applicable to all lines of the mechanical trades.

No. 4 B. B.— Price (Glere), \$7.00.

Diameter of Wheel — 20".

Weight of Wheel — 40 lbs.

Total Weight — 65 lbs.

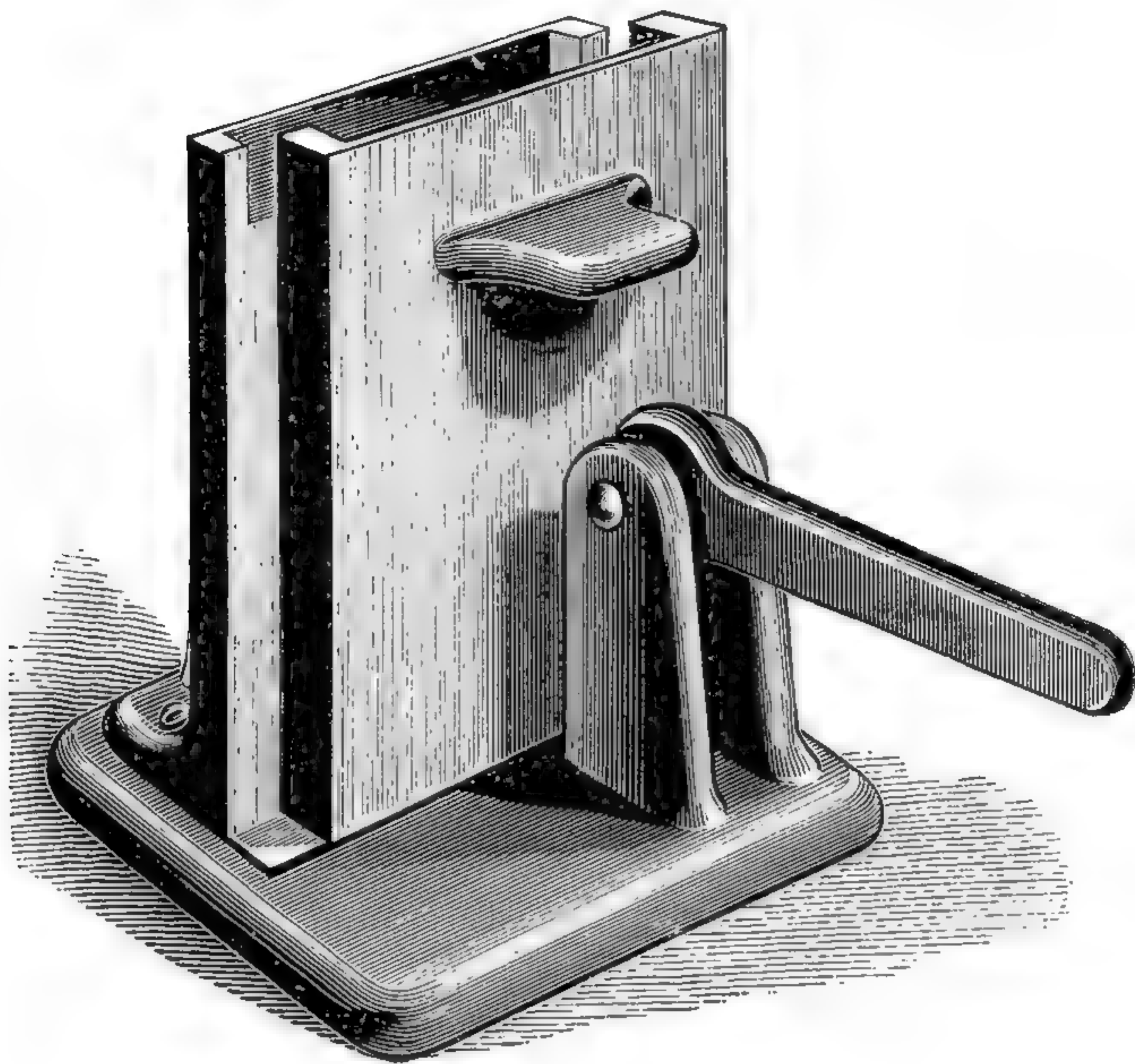
Gross Weight — Domestic Shipment, 75 lbs.

“ “ — Foreign “ 93 “

Dimensions — “ “ 29" x 22" x 12".



Upright Sliding Ingot Moulds



The bodies of these ingot moulds are well made of close gray iron; the levers of malleable iron. The inside surfaces are milled perfectly smooth, and coated with a compound to prevent the metal adhering to them. They are adjustable sideways, so that any width of metal, from $2\frac{3}{4}$ " down, can be cast. In ordering, give number of ingot mould and thickness of same.

No. 1	— 3"	high,	$2\frac{3}{4}$ "	wide,	$\frac{1}{8}$	or $\frac{3}{16}$ "	thick.	Price, \$2.00
No. 2	— $4\frac{1}{2}$ "	"	$2\frac{3}{4}$ "	"	$\frac{1}{8}$, $\frac{3}{16}$	" $\frac{1}{4}$ "	"	" 2.50
No. 3	— 6"	"	$2\frac{3}{4}$ "	"	$\frac{1}{8}$, $\frac{3}{16}$	" $\frac{1}{4}$ "	"	" 3.00

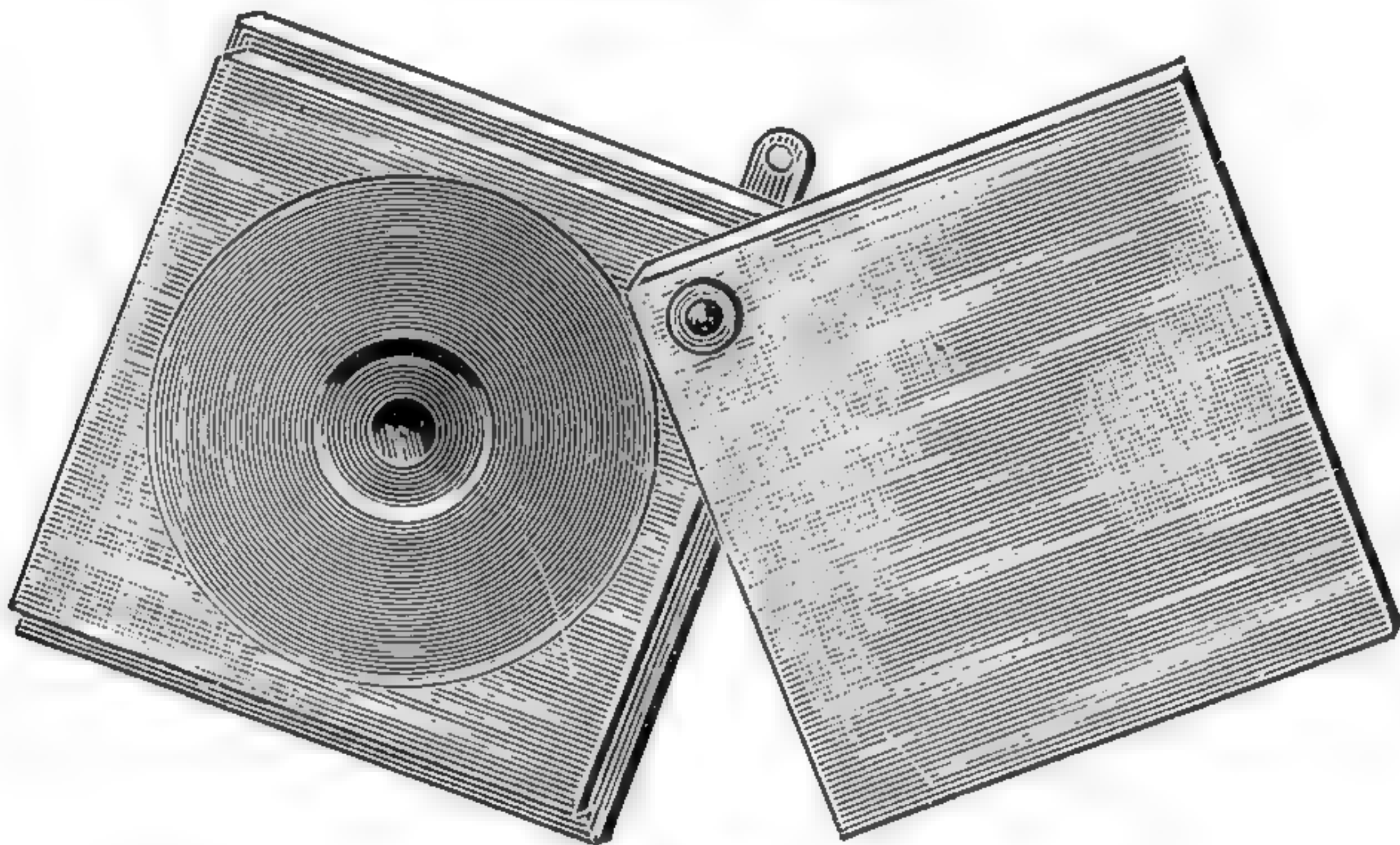
Crucible Tongs



These tongs are light and strong, being made of malleable iron. They will be found very useful in handling small crucibles, also for use about the forge.

	Single	Per Doz.
No. 1—12" long,	\$0.40	\$4.00
No. 2—17" "50	5.00

Metal Laps



Price, per inch in diameter — \$1.00.

We make them from 4" to 14" in diameter, and charge them with emery or corundum, coarse and fine, on one or both sides, as ordered. In ordering, give exact size of spindle they are to fit. The cut represents a lap and the box in which we ship them. This box will be found very serviceable for holding the lap when not in use.

Iron charging block, for coarse side, . .	Price, \$0.50
Hardened steel charging block, for fine side, "	1.00



Index

	PAGE
Attachments — Motor Polishing Heads, . . .	47
Chucks — “New Model” Drill,	69
“ Geared Pattern “New Model”	
Drill,	70
“ “Champion” Geared Scroll,	69
“ “Champion” Independent Jaw, . .	69
Countershafts,	67
Drawbenches — Hand,	82
“ Power,	83
Drills — Bench,	75, 77
“ Upright,	79
“ Electric Motor Driven,	81
Dynamo, Plating,	48
Foot Wheels,	102, 103
“ “ Improved	104, 105
“ “ Ball Bearing,	106, 107
Hammers, Fiber Faced,	85
Heads — Electric Motor Polishing, alternating	
current,	46
“ Electric Motor Polishing, direct cur-	
rent,	42, 43, 44, 45
“ Lap,	100, 101
“ Polishing,	89, 91, 93, 95, 96, 97, 98
Ingot Moulds,	108
Laps, Metal,	109
Lathes — Bench,	65
“ Jewelers’ Foot,	63
“ Plain Foot,	61
“ Polishing,	86, 87, 88, 90, 92, 94
“ Speed,	59
Mandrels — Lathe Ring Mandrels,	57
“ Hardened Graduated,	57
“ Taper Ring,	57



	PAGE
Presses — Drop,	72, 73
Ring Bender, "Little Giant,"	56
Ring Stretcher, "Perfect,"	52
Rolling Mills — Crown Dental,	5
" " Single Geared Hand Flat Rolls,	7
" " Double " " " "	9
" " Single " " Plain Rings,	11
" " Double " " " "	13
" " Single " " Square Wire,	15
" " Double " " " "	17
" " Double " " Universal,	23
" " Double " Power "	25
" " Triple " " "	27
" " Double " " Plain Rings,	29
" " Double " " Square Wire,	31
" " Triple " " Flat Rolls,	33
" " Triple " " Toggle Con-	
n e c t i o n s ,	
Flat Rolls,	35, 37
" " Triple " Toggle Connec-	
tions, Flat Rolls, Electric	
Motor Driven,	41
" " Triple Geared Power Reversing,	39
Rolls — Plain Ring,	18
" Square Wire,	19
Shapes of Rolls, Standard,	20
Shears — Bench,	49, 52
" Compound,	52
Slide Rest,	65
Springboard Foundation for Drop,	73
Tongs, Crucible,	109

THE
MATTHEWS-NORTHRUP
WORKS
BUFFALO CLEVELAND AND NEW YORK



Posted Dec. 2022
B.D. Szafranski
Elma NY USA

Please do not reprint
for commercial profit.

